

How to Invest for
Income and Profit
During 1931

PRICE INDEXES
(1925 CLOSE = 100)

STEEL INKOT PRODUCTION
(MILLIONS OF TONS)

U.S. STEEL EARNINGS
(MILLIONS OF DOLLARS)

A-CALL MONEY - (% OF PREVIOUS YEAR)

B-CALL MONEY-AVE RENEWAL RATE

C-MAC OF WALL ST COMBINED AVERAGE

D-STEEL STOCKS PRICE INDEX

E-NEW ORDERS

F-BUSINESS ACTIVITY

G-STEEL INKOT PRODUCTION

H-U.S. STEEL EARNINGS

1926 1927 1928 1929 1930

PRICE INDEXES
(1925 CLOSE = 100)

U.S. STEEL EARNINGS
(MILLIONS OF DOLLARS)

STEEL INgot PRODUCTION
(MILLIONS OF TONS)

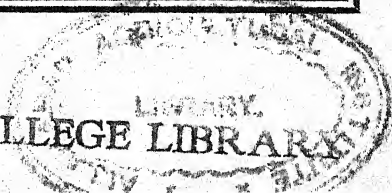
How to Invest for
Income and Profit
During 1931

by
EDGAR T. BRAINERD



THE MAGAZINE OF WALL STREET
42 BROADWAY
NEW YORK, N. Y.

WEBER COLLEGE LIBRARY



Copyright, 1931, by
TICKER PUBLISHING COMPANY, INC.
42 BROADWAY
NEW YORK CITY

332.6
2240

Preface

In the pages that follow will be found a number of well tested methods of selecting security investments, with special emphasis upon when to buy and the time to dispose of them. Some of these methods have been elaborated in previous publications by THE MAGAZINE OF WALL STREET: while others are released here for the first time.

Considerable attention has been given to forecasting major movements in the business and stock market cycles, and to economic forecasting barometers for separate industries. There is also a comprehensive, though condensed, description of how to read the "Technical position." People who are skilled in the latter art find it of great assistance in selecting individual stocks.

The book includes a number of tables of per-share earnings of leading listed stocks, compensated for stock dividends and split-ups. The story of earnings' trends told by these tables is not only of value as a permanent record of financial developments that led up to the memorable crisis of 1929; but will remain useful for several years to come as a means of determining, by the Durand method, what a stock is really worth as a long pull investment. The records of earnings during the four-year period of rising prosperity that was halted temporarily in 1929 are of more than transient interest; because a common stock's intrinsic value is not much impaired by a year or two of diminishing earnings. To quote from the great English economist, Sir Josiah Stamp: "In judging the value of a stock, the earnings of one particular year are of relatively

small importance: the basis for determining intrinsic value is the record of earnings over a series of years plus a soundly reasoned estimate of earnings fairly to be expected in the future."

The recent severe decline in security prices has offered to discriminating investors an unusual opportunity to acquire the common stocks of sound and progressive companies at bargain prices which have not been seen since the panic of 1921. The methods outlined in the following pages are thus published at a most opportune time to aid investors in deciding what stocks and what industries to select and what to avoid. The simple explanation of the Durand method of estimating intrinsic values, included in the chapter on Public Utilities, will be especially welcomed by thoughtful long pull investors.

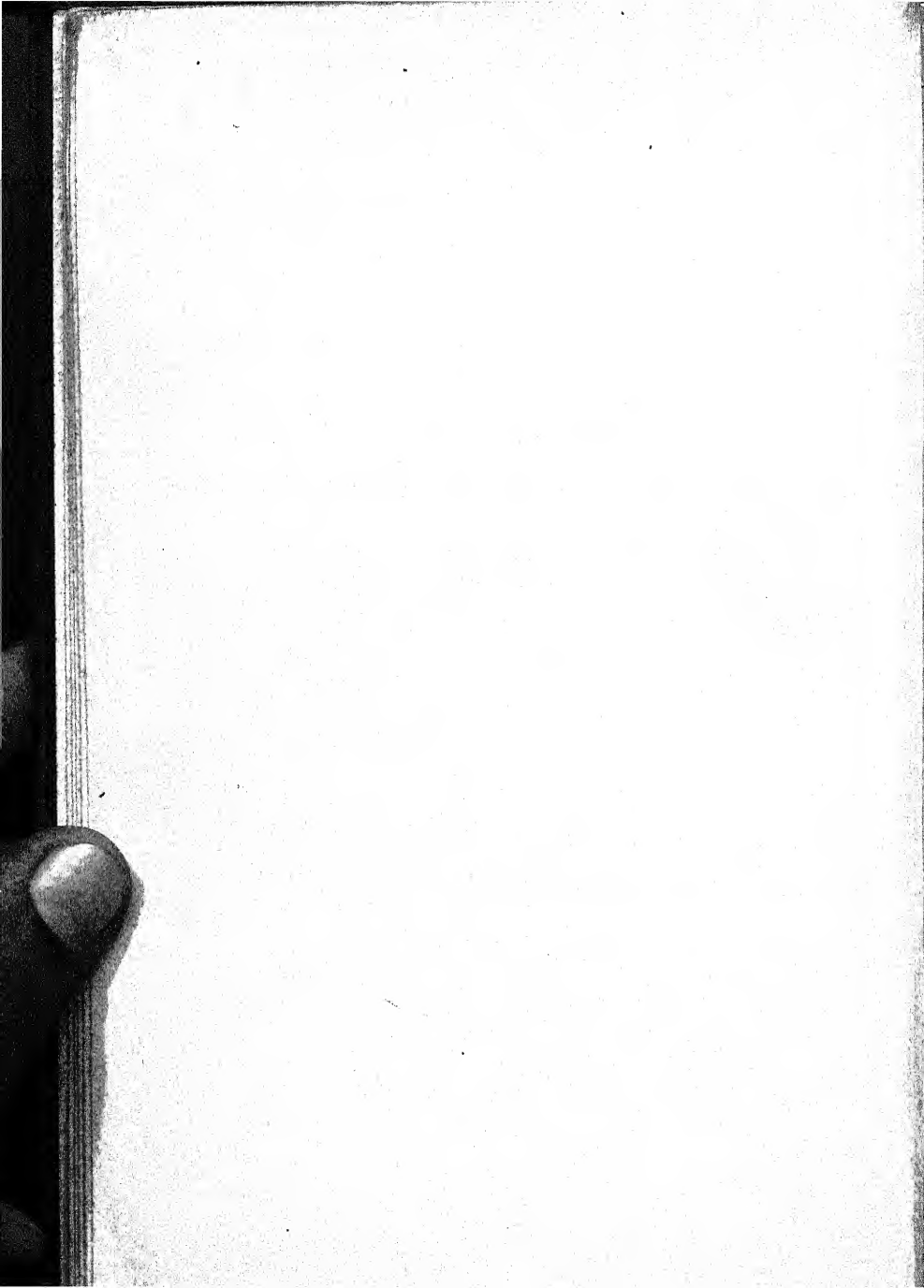
The time and expense involved in preparing the present volume will have been well repaid if it serves, even in small measure, to help investors think for themselves before purchasing securities on the advice of Tom, Dick, and Harry.

September, 1930

FRANK ALBEE GIFFIN, M.A.
New York City

Contents

	PAGE
PREFACE	iii
CHAPTER	
I. THE MODERN TECHNIQUE OF INVESTING	1
II. STEEL	11
III. AUTOMOBILES, TIRES, AND ACCESSORIES .	19
IV. PUBLIC UTILITIES	29
V. RAILROADS	41
VI. MINING	51
VII. RETAIL MERCHANDISING	63
VIII. FOOD MANUFACTURING	73
IX. OIL	79
X. CONSTRUCTION AND EQUIPMENT STOCKS	87
XI. INVESTMENT TRUSTS	97
XII. MISCELLANEOUS INDUSTRIES	105
XIII. BONDS AND PREFERRED STOCKS	123



How to Invest for Income and Profit During 1931

CHAPTER I

The Modern Technique of Investing

WITHIN the brief span of a few years, scarcely a decade, great changes have taken place in the technique of investing. The gratifying rise in real wages since the War has made it possible for people with moderate incomes to save and invest, where formerly it was only the wealthy who could own stocks and bonds. Proprietorship in our leading corporations is rapidly being taken out of the hands of the few, to be distributed among the many. Popular vote has always elected our public officers: it may soon exert a powerful influence upon the appointment of business executives. Where formerly the investor had little but rumor and often misleading statements to guide him, there is now a great mass of reliable statistics on business conditions and frequent publication of numerous corporate reports to aid him in selecting. Today it is possible for the public to form its own opinions as to conditions, and inside information will soon cease to remain exclusive property of the few. Investing has progressed from an art to a regular business, and promises soon to become a science.

Basic Investment Principles

For purposes of the present work it is well to distinguish at the outset between investing, speculating, and gambling. A person who buys and sells stocks and bonds on hunches and irresponsible tips, without investigating business conditions or analyzing the outlook for the securities in which he deals, is gambling. On the other hand, a person of experience and good judgment, who buys and sells securities after a careful investigation of the outlook, or upon the advice of competent and disinterested investment counsel, is investing—regardless of whether his chief object be cash income or profits.

In the earlier days, investors bought securities (mostly bonds) for cash income only, with the intention of holding for a number of years, regardless of intermediate fluctuations in market price. People who undertook to profit by intermediate fluctuations were mostly insiders who manipulated the market, and the uninformed public which traded largely on guesswork. Today speculation, which may be defined as an intelligent effort to increase one's principal by purchasing stocks and bonds with the object of selling them later at a profit, is recognized as a *bona fide* branch of investing; for it is now possible to forecast the more important market movements with a comparatively low percentage of error.

To achieve the greatest success in investing under modern conditions it is essential to observe the following basic principles:

- I. Analyze your own personal requirements.
- II. Decide whether you are going to follow your own judgment or the advice of disinterested experts.
- III. Choose the right time to buy and the right time to sell.

IV. Select your securities with discrimination.

Before proceeding to take up these four principles in more detail, it may be observed that the investor may disregard the last two if he decides to follow disinterested and expert advice; for these will be carefully and capably taken care of by his investment counsel.

Individual Requirements

Before embarking upon an investment program it is important to examine your own tastes and needs under the following headings:

A. Purpose of Investment.

By this we mean what you expect to find in an investment—safety, income, profit, or liquidity. All four of these desirable characteristics are seldom to be found in a single investment. In stressing one, you are likely to have to compromise on some of the others.

a. Safety.

The emphasis placed upon safety varies greatly with the individual. Widows and elderly people, whose sole means of subsistence rests upon the income from their investments, must place greater emphasis upon the safety of their principal than do younger business men and women whose current earnings render them independent of any outside income. The latter can afford to take reasonable speculative chances in the hope of building up a retirement fund more rapidly. The former must accept a lower income and fewer opportunities for enhancement of principal in order to safeguard what they already have.

b. Income.

The person who seeks a high rate of return upon his investments must make a proportionate sacrifice in the safety of his principal. Frequently, too, a high rate of return is incompatible with rapid appreciation of prin-

capital. Among the three main classes of securities, common stocks usually offer the greatest possibilities for profit, and those that are most likely to rise in market price within a reasonable period of time are the issues that yield a low rate from cash dividends, or else pay no dividends at all. For this reason one must turn to bonds or preferred stocks for the higher yields. Even here, the degree of risk to both income and principal is frequently proportionate to the yield.

c. Profit.

It should be understood clearly that the investor who buys with a main eye to profit is speculating, regardless of whether he buys outright or on margin. Other things being equal, the risk is of course greater on margin than when securities are paid for in full: nevertheless the risk is always there to be reckoned with. There can be no profit without fluctuations in market price, and if a stock can rise considerably it might drop even more quickly. It is in the selection of speculative commitments that one requires the greatest judgment and is most in need of expert advice.

d. Liquidity.

There is always a wide spread between bid and ask prices in inactive stocks listed on the New York Stock Exchange, and usually in most unlisted stocks. If you buy these it may be impossible to sell them later without loss, especially when there is any considerable amount of stock to dispose of in a hurry. This is an important consideration with big operators and many investment trusts. And so, when arranging your investments, it is important to estimate your future needs for cash, and to keep on hand enough securities that always enjoy a ready market to provide for unforeseen emergencies. On the other hand, unlisted securities and those that are handicapped by a "thin" market are

frequently obtainable on a higher yield basis than others that are more readily marketable.

B. Long vs. Short Pull.

There is a great difference among individuals as to the length of time an investment is customarily held. Some aim to turn over their capital quite frequently; others buy only for a long pull; while a few, even in this restless day and generation, still cling to the belief in permanent investments. Personal predilection in this respect depends much upon native temperament and the amount of attention one gives to the business of investing. To be successful as a trader one must, among other qualifications, be extremely versatile and devote a great deal of time to the business. Long pull investors, on the other hand, are usually conservative in disposition and give little time to their investments. There is a desirable middle ground between these extremes which consists in buying for a semi-long pull. Under this plan the investor purchases a stock or bond when he believes it to be under priced, at a time when he thinks it is likely to rise in market price within a reasonable period of time, and then sells out when it looks as though the profit making possibilities of the issue are about exhausted for the time being. This method of investing is now regarded as the most satisfactory in the long run, and is the one to which the greatest amount of attention will be devoted in the following pages. To be successful in this comparatively frequent shifting of investments a person must either devote a considerable amount of his own time to the business or else operate with the assistance of competent advice.

C. Class of Security.

The relative proportions in which an investor's funds are distributed among the three principle classes of

securities—common stocks, preferred stocks, and bonds—depends upon the plan of operation that is adopted and the objects to be attained. Ordinarily, bonds are bought for safety and common stocks for profit. Preferred stocks and bonds with warrants or conversion privileges occupy a sort of middle ground between the two. We have reserved one chapter of the present work for a discussion of bonds and preferred stocks as media of investment: the remaining pages will be devoted largely to common stocks.

Personal Judgment vs. Advice

The investment business deals with a highly specialized field, just as law or medicine or engineering or any other profession, and yet everyone seems to consider himself qualified to select his own investments and to advise others what to buy. A person who is known to have funds to invest is beset on all sides with advice about what to do with his money. Friends, acquaintances, room traders, customers' men, inventors, promoters, and stock salesmen are all eager to give assistance. Their motives range all the way from a genuine desire to be of service down to the simple wish to make a profit for themselves. All of the advice emanating from these sources is gratis and, in the majority of cases, is worth what you pay for it. It may prove very expensive if acted upon; in which event your losses would have to be charged off by that special double entry system which makes the experience worth its cost.

Another even more uncertain source of—not advice but, shall we say, "incitement" to buy is of impersonal—often anonymous—origin. These are the rumors and tips and gossip for which no one assumes responsibility, but which everyone passes along "in strict confidence." It is a curious sidelight upon the amateur

investor's mentality that he will place more credence in anonymous advice to buy a stock for no ascertainable reason, than in a thorough and intelligent analysis of its intrinsic merits as an investment. He is supposed to be receiving "inside information," and labors under the delusion that inside information is more profitable than personal investigation or the opinion of responsible and disinterested experts.

To seek advice before making an investment is no reflection upon one's own ability or intelligence. Everyone can profit in one way or another by the opinion and suggestions of others. The biggest business men and corporations and institutions pay the most for expert advice.

There are three classes of investors who can profit by advice: those who do not know how to invest advantageously, but are anxious to learn; those who do know how to invest, but lack time to give the business sufficient attention; and those who have both the time and the knowledge, but appreciate that two heads are better than one in such a highly specialized field. In fact it is the expert in every profession who devotes the most time to acquaint himself with what others in his line are thinking and doing. He confers with prominent confreres, reads the technical publications, and attends meetings of his profession. It is his only way of keeping posted on new developments, except for the few discoveries that crowded working hours permit him to make on his own account.

Sound advice is thus always helpful to the investor, whether he decides to rely wholly upon outside recommendations or to rely in part upon his own judgment. Only be sure that the advice you follow is both reliable and disinterested. Ordinarily good investment advice costs money and is well worth what you pay for it. In the absence of other evidence the price asked for

investment advice is a fair measure of its value. Nevertheless it is just as well to ask yourself if the person or organization offering the advice is really disinterested. Does your adviser own or trade in any of the securities he is advising you to buy or sell? Does he make a commission on, or profit otherwise by, your transactions? The customers' man in a brokerage house, for example, is likely to be over zealous in urging people to trade. This evil had indeed reached such proportions that the Stock Exchange has recently promulgated regulations to restrict the handling of discretionary accounts by customers' men.

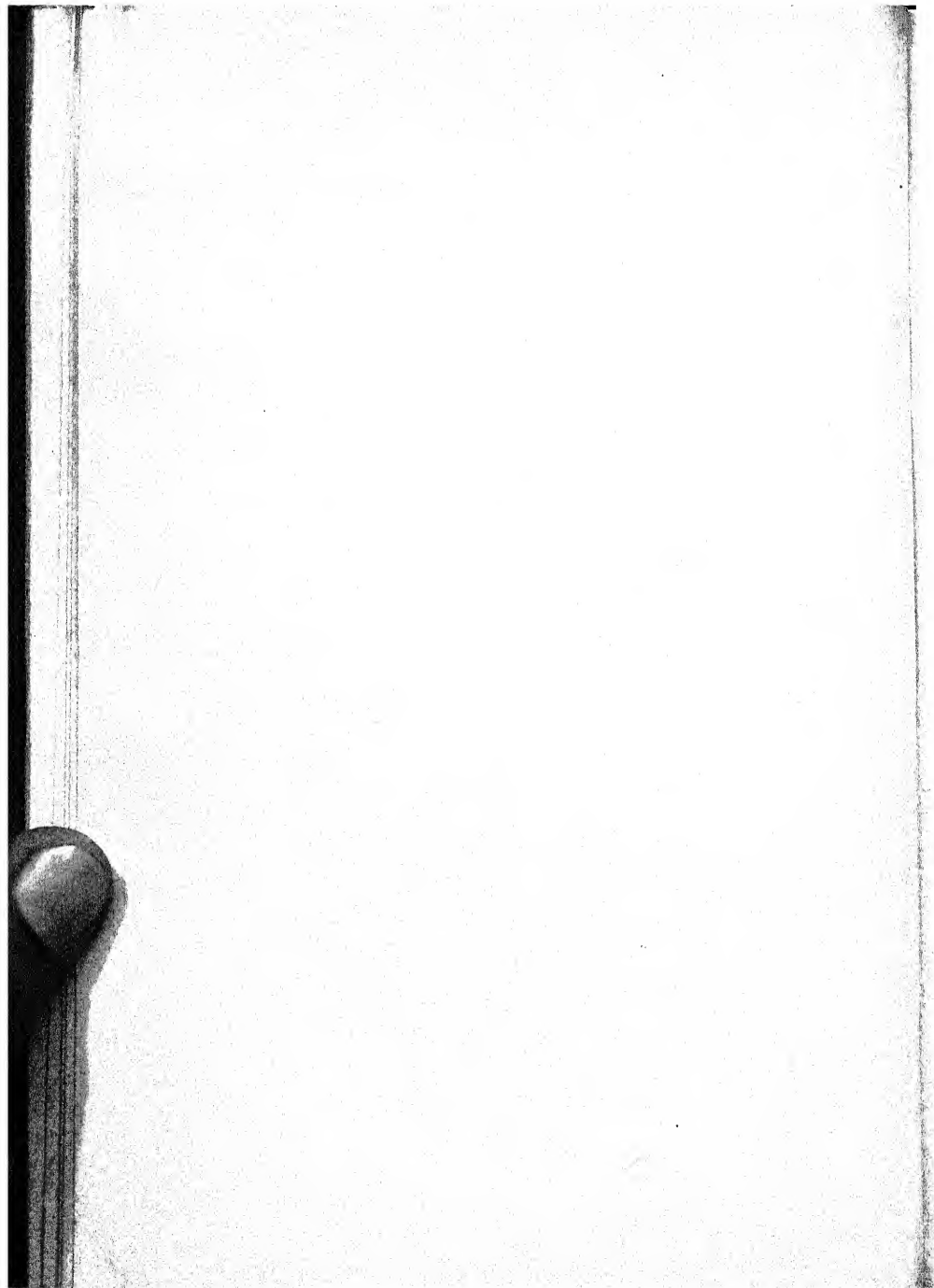
Investors should be exceptionally wary of buying stocks from canvassers, or by mail, through little known houses. Good investments are seldom hawked from door to door, or offered with extravagant promises. As a rule, most of the money that is paid for such stock goes into the pockets of promoters and their salesmen. The New York Stock Exchange does not permit estimates of future earnings in the prospectuses of new security offerings by its members.

Timing and Selecting the Investments

In the pages that follow it will be assumed that the investor has the time to make his own selections of securities, either with or without the assistance of outside advice, and that, in doing so, he wishes to follow modern scientific methods. With this purpose in view, the first consideration is the outlook for the market as a whole; for all securities, good and bad, tend to follow the broader moves in the stock market in direction, if not in magnitude. For this reason the first rule for successful investing is to buy securities when the outlook points to a broad upward movement in the general market, and to dispose of them when the upward movement seems likely to end for awhile. The second

investment principle to be observed is that not all industries are equally prosperous, so that it is important to make selections from among those industries in which the outlook is favorable, and to dispose of such securities when indications point to a decline in prosperity in such industries.

And finally, comes the decision as to which securities in the selected industries are most attractive from the standpoint of current yield and possibilities for price appreciation. This can be determined by methods described in the following pages.



CHAPTER II

Steel

BEFORE investing in common stocks, or deciding to dispose of them, there are certain lines of investigation that should be carried out quite regardless of the individual issue under consideration. There are certain sound lines of procedure which apply equally well to all common stocks. In the present chapter some of these general investment principles will be considered under the following three main headings:

- I. Trend of the general stock market.
- II. Trend of special groups.
- III. Trend of individual stocks.

Price Trends

The first point for an investor to decide is whether he desires cash income or appreciation of principal; for it is seldom safe to seek both in the same commitment. Stocks which are destined to rise in market price usually sell on a low current yield basis or pay no cash dividends at all. Of course there are exceptions; but it requires unusual experience and shrewdness to recognize an overlooked bargain. And so we would counsel the average investor who is looking for a cash income to stick to preferred stocks and bonds whose periodic cash disbursements are reasonably certain as to continuity and fixed in amount. Even here there are speculative possibilities, as will appear in subsequent chapters devoted to that class of securities; but opportunities for profit are, on the whole, less than in

common stocks, and so they sell on a higher current yield basis than common stocks of growing companies.

Since common stocks are to be bought primarily with a view to appreciation in market price, it is obviously desirable to select issues that are going to advance in market price and dispose of them when the rise is about over. To pursue such an in-and-out investment policy effectively calls for an ability to recognize current trends—the direction in which prices are going to move in the reasonably near future. With study and practice it is possible to do this in a fairly high percentage of instances; though it is often very hard to say which stocks are going to advance the fastest. Qualitative forecasts are much easier to make than quantitative; because the former can be based upon known economic developments, whereas the latter are complicated by the market operations of people whose activities are more or less impulsive. For the present, then, let us confine the attention to forecasting the direction in which prices are going to move, and when the movement is likely to begin, without attempting to predict its size, speed, or duration.

The first rule to observe in forecasting the price changes in common stocks is that all common stocks are more or less influenced by sharp movements in the general market. This means that it is prudent to dispose of all common stocks when a market panic such as that of October and November, 1929, is threatened, and to hold one's capital in liquid condition to reinvest when a general advance in the market again seems likely. This is why it is so important to learn how to forecast movements in the general, or "Combined," averages.

The second forecasting rule to observe is that, while all common stocks tend to follow the general market in *direction*, the *magnitude* of price movements in an

individual issue conforms more closely to group movements of the industry to which the stock belongs. Copper stocks, for example, usually move up and down in sympathy with the general market; but, at times when prices for the metal are advancing rapidly, copper stocks as a group will rise more rapidly than the Combined Average when it advances, and sell off less than the Combined Average during periods of general weakness in the market. This means that the successful investor in common stocks must not only learn how to forecast important movements in the general market, but must also be familiar with conditions which are likely to produce marked strength or weakness in the group averages of various industries. In the present chapter special attention will be given to the steel group.

Steel and the Combined Average

Steel is given first place in a series of chapters on separate industries; because price movements in the steel group index parallel the Combined Average so faithfully in direction that to forecast one is to forecast the other. Even the magnitude of movements in the steel group index agree closely with the Combined Average, as will be observed from the frontispiece. Fortunately the modern science of market forecasting has developed to a point where it is now possible to predict important movements in the Combined Average with a fair degree of certainty from fundamental economic data alone, owing to the impossibility of manipulating at one time the great number of listed stocks. And a study of developments in the steel industry is of special assistance in forecasting the general market, on account of the close relationship that exists between activity at the steel mills and prosperity in the majority of our key industries. To quote from

a book by John Durand, "The New Technique of Uncovering Security Bargains":

"Products of the iron and steel industry—whether in the raw, semi-finished, or finished state—are used by other industries as raw material for further manufacture. There is no direct consumer demand for steel: it must be sold to other industries. Hence the outlook for steel, so far as volume of output is concerned, is always nothing more nor less than the composite outlook of its industrial customers."

The Forecasting Chart

The principle economic data which the writer has found useful in forecasting turning points (changes in market trend) of the Combined Average, and hence of the steel group price index, are graphically presented in the chart which appears as the frontispiece to the present volume. On this chart, "B" is a curve of monthly average renewal rates for call money. "A" is the same, computed in percentages of the average for the corresponding month a year earlier. "C" is the Combined Average of all stocks used in computing THE MAGAZINE OF WALL STREET's Common Stock Price Index, which this year (1930) includes 428 different issues. "D" is THE MAGAZINE's Steel group price index. "E" is THE MAGAZINE OF WALL STREET's index of new orders booked each month by leading industries. "F" is THE MAGAZINE's index of Business Activity. Both "E" and "F" are expressed in percentages of the corresponding month a year earlier. "G" is a curve showing the monthly output of steel ingots by the entire industry. "H" shows monthly earnings of the U. S. Steel Corporation, after taxes, and fixed charges of subsidiaries; but before depreciation, depletion, interest and sinking fund on parent company's bonds. The "H" curve has been added here to convey

a picture of the degree of parallelism that may be expected between earnings and steel ingot production. It is important to observe that there is a good general correspondence between the broader movements in steel earnings and the steel group price index; but neither curve is of much value in forecasting minor movements in the other. As to major movements, the admittedly short period of experience covered by our chart points to the conclusion that the steel group price index turns upward about two months before the recovery in earnings sets in, whereas earnings usually turn downward about three months in advance of the corresponding decline in the steel group price index. This is a good example of the general forecasting rule that the stock market almost always responds more promptly to bullish than to bearish influences. The rule also helps to explain why the bottoms of market cycles are pointed, whereas the tops are usually flat or arched.

Actual versus Comparison Graphs

For purposes of interpreting economic statistics it is useful to plot both the actual data and their percentage relation to the corresponding figures a year earlier. For convenience we shall refer to these as the actual graph and the percentage, or comparison, graph. Both forms are shown in the frontispiece chart. Our Business Activity and New Orders curves are both computed on the comparison basis, whereas Call Money fluctuations are presented in both ways. The graph of *actual* Steel Ingot Production though not a wholly comprehensive index of Business Activity, is sufficiently useful as a counterpart to our *comparative* Business Activity graph.

The yearly comparison method of presenting economic statistics enjoys the twofold advantage of eliminating seasonal influences, where such exist, and of

disclosing any pronounced change in trend much sooner than the actual graph. Both of these properties are brought out clearly in the two Call Money curves. It will be noted that the market rise in rates at year ends, shown in the actual graph, disappears in the comparison graph; and that call money rates toward the close of the late bull market reached their peak in March, 1929, on the comparison graph—four months earlier than the highest point reached by the actual graph.

The comparison graph shows how much conditions are ahead of or behind last year at the corresponding time—the sort of information that is of the greatest practical value to business executives and security analysts. During periods of business depression and falling security markets, these comparison graphs serve the useful purpose of sifting out the wheat from all the chaff dished up by column writers who like to see in a mere seasonal recovery the sure evidence of fundamental improvement in conditions. At present writing (June, 1930), all the chronic optimists are hailing the first quarter's recovery in business activity from the extreme low reached in December as incontrovertible evidence that the worst is over. A glance at our chart conveys unfortunately, a less rosy impression of the situation. The "G" curve shows that there is always a sharp seasonal pick-up during the first three months of the year; but the "F" curve discloses that the rebound this year possessed less vitality than last year. There is thus as yet no evidence of a fundamental turn for the better in the business outlook, though it is encouraging to note that the rate of decline is diminishing.

Forecasting from the Indicators

Close study of our chart will disclose that important declines in the Business Activity graph normally begin

about two months later than the corresponding decline in our New Orders curve, whereas the time lag is only about a month on recoveries. The chart also shows that both the steel price index and the Combined Average reach at least temporary tops about two months later than the Business Activity curve, whereas rallies in the stock market begin at about the same time as recoveries in steel ingot production.

The foregoing observations apply to market swings of short duration which ordinarily last for only a few months. There is a possibility that the broader market movements are forecasted by the Business Activity curve much further in advance, though the period of a little more than four years covered by our chart is too short for adequate verification of the hypothesis.

Turning now to the use of our indicators as a means of forecasting actual changes in industrial activity (here represented by the steel ingot curve), it will be observed that the Business Activity graph seems to function as an excellent prophet of the broader swings in business conditions. In the year, 1927, for example, the Business Activity curve touched bottom about four months before the extreme low point reached in steel ingot production; and the decline in steel mill activity that set in around May of 1929 was foreshadowed six months earlier by the Business Activity graph. Of course the reason why the latter is so forehanded in its indications is because it registers changes in the rate of increase or decrease in activity. Business acquires momentum, and must slow down before reversing.

Call Money and the Stock Market

In the use of call money as a market barometer it is essential to draw a sharp distinction between high rates and advancing rates, and between low rates and declining rates. Abnormally high interest rates always point

to the approaching end of a prolonged bull market. Abnormally low rates point to the approaching end of a major bear market. On the other hand, rising rates for call money while the market is declining are bullish on the nearby trend, whereas a drop in demand rates during a rising market nearly always points to a nearby reaction in prices.

Individual Issues

Methods of checking up advice on individual stocks will be taken up in future chapters; for many of the general principles apply as well to stocks in one group as in another. In the meantime we shall close the present chapter with a reference table of per-share earnings of leading common stocks in the steel group, compensated for split-ups and stock dividends.

TABLE I
LEADING STEEL AND IRON STOCKS
Compensated Annual Earnings per Common Share

	1925	1926	1927	1928	1929	1929 High
Amer. Rolling Mill.....	1.93	3.02	2.71	2.92	4.40	144½
Bethlehem Steel	5.30	7.48	5.02	6.52	11.01	140¼
British Empire Steel.....	Def.	Def.	Def.	Def.	Def.	6½
Byers (A. M.).....	4.82	7.71	4.77	5.77	5.81	192¾
Colorado Fuel & Iron.....	4.65	7.60	7.10	2.50	6.43	78½
Crucible Steel	7.52	8.47	6.83	6.86	11.32	118¼
Follansbee Bros.	2.11	3.58	3.48	7.53	7.41	82¾
Gulf States Steel	7.17	5.28	4.93	6.28	5.93	79
Inland Steel	3.53	5.45	5.16	7.63	9.76	113
Interlake Iron	1.23	2.29	1.41	1.78	2.85	47½
Ludlum Steel	2.97	2.12	1.67	4.35	3.68	108¾
Newton Steel	3.66	2.12	1.72	6.28	7.37	113
Otis Steel	1.06	2.03	0.76	3.16	3.41	55
Sloss-Sheffield Stl. & I.....	15.10	16.38	6.82	6.11	1.07	125
Superior Steel	1.26	2.72	Def.	0.29	0.66	73¾
Truscon Steel	2.58	2.81	2.39	2.69	3.12	52¾
U. S. Pipe & Foundry.....	7.61	6.92	4.06	1.46	2.74	55¾
U. S. Steel.....	9.18	12.85	8.81	12.50	21.19	261¾
Warren Foundry & Pipe.....	2.60	2.87	1.27	0.06	1.47	34¾
Youngstown Sheet & Tube.....	10.32	11.94	5.09	7.95	17.23	145¾

CHAPTER III

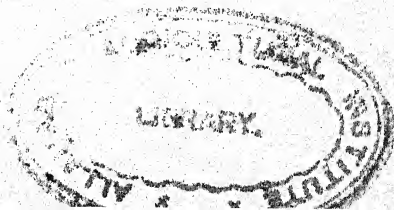
Automobiles, Tires, and Accessories

A. Automobiles

WITHIN the short span of a generation the manufacture, sales, and servicing of automobiles has grown into a huge key industry which directly and indirectly, creates annually about one-twelfth of our new wealth, and offers support to about a tenth of our population. In its consumption of about one-seventh of the annual output of steel in this country it ranks second only to the railroads, which normally take about 25% of the total tonnage. During the past five or six years, the fluctuating output from automobile factories has been a major factor in the ups and downs of general business conditions. It is now recognized, for example, that the virtual closing down of Ford plants during the latter half of 1927 was a contributing factor in the business recession experienced throughout the country at that time. Ford's output, which had been as high as 58% of that of the entire industry in 1928, and was even 50% in 1924, fell to 12% in 1927, rising to 36% in 1929.

Group Forecasting

Since the automobile industry is subjected to all the ups and downs of seasonal fluctuations in demand, changes in style, and periodic variations in the public's purchasing power, it is not surprising to find that most of the common stocks in this group are highly speculative. A few, of which General Motors is the most conspicuous example, may perhaps be held profitably

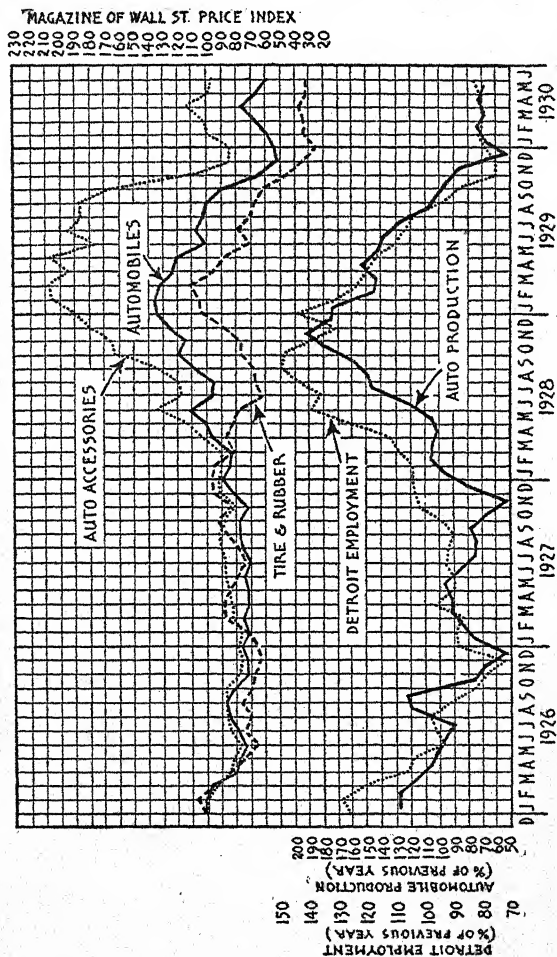


for the long pull, from one business cycle to another; but it is much the better policy to regard most automobile common stocks as spec-vestments to be bought when prospects for the individual company and the industry are improving, and disposed of upon the first indication that prospects are becoming less favorable. 1926 and 1927 were rather unfavorable years, and 1928 a very good year, for automobile manufacturers. It will be noted from Table II that the earnings of most automobile companies fell off during the two former years and increased handsomely in 1928. The odds are in favor of the spec-vestor who buys automobile common stocks when the industry's outlook is favorable, and against him when prospects favor a decline in the stock market price index of the group as a whole. And so it is of first importance to learn how to forecast market movements in the automobile group price index. Economic data which serve as barometers for the automobile market group are platted in the accompanying chart.

Since the automobile industry participates in, and is partly responsible for, the general business cycle, we find that the automobile price index usually moves in the same direction as the Combined Average of all common stocks, though the magnitude of swing frequently differs widely from that of the general market. And so, as with the steel stocks, any method of forecasting turning points in the automobile group index serves equally well to forecast the direction in which the Combined Average will move—and *vice versa*.

The obvious economic barometer for forecasting movements in the automobile group index is a curve of automobile production, expressed as a percentage of the corresponding output the year before. As will be observed from the accompanying chart, turning points in this barometric curve usually occur two or three

AUTOMOBILE GROUP INDICATORS



months earlier than corresponding turning points in the automobile group index.

A Barometer of a Barometer

For purposes of forecasting price movements in automobile stocks as a group, we are fortunate in having not only a barometer, but a curve whose turning points occur even earlier than turning points in the barometric curve. Such a curve is known as a "Barometer of a barometer"; because it enables one to forecast turning points in the barometer itself. A curve of Employment at Detroit, expressed in percentages of employment a year earlier, usually turns upward or downward about two or three months earlier than the automobile production barometer. The accompanying chart shows this time lag quite clearly. Of course the explanation is that men have to be employed a few months before they can turn out the additional number of cars.

Both the production and the employment curves include the Ford plants, whose stock is not listed. This accounts for the anomalous situation that developed during the last quarter of 1927, when a rise in the employment curve was accompanied by a sharp drop in the production curve. It will be recalled that Ford production then came to a virtual standstill, while a large force of employees was busily engaged in remodeling machinery for production of the new car.

Selecting the Stock

Sometimes a glance at the monthly reports of new passenger car registrations, published in some of the trade journals and financial papers, will afford a clue as to which stock to buy; but better indications can generally be derived from a systematic perusal of other news items from the industry, by an analysis of quar-

terly earnings statements, and close study of the so-called "Technical position." Further reference to the latter method will appear in subsequent chapters.

There have been four years of lessened output in the automobile industry during the past decade—1921, 1924, 1927, and 1930. The entire industry generally suffered from these periods of diminished activity, except in 1927, when the Ford plants alone bore the burden. Exclusive of Ford, total production in 1927 exceeded that of 1926, and this explains why the sharp drop in our production barometer found only minor reflection in THE MAGAZINE OF WALL STREET'S automobile group price index.

TABLE II
PER-SHARE EARNINGS RECORD OF LEADING LISTED MOTOR STOCKS
(Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Auburn	9.18	8.26	8.24	9.56	20.41	484 $\frac{3}{8}$
Brockway	5.52	4.58	5.56	4.53	0.54	73 $\frac{7}{8}$
Chrysler	5.42	4.89	6.15	7.03	4.94	135
Federal	2.47	2.45	0.90	1.13	1.00	22 $\frac{3}{8}$
Gardner .....	.....	0.16	Def.	Def.	Def.	25
General	2.80	4.11	5.19	6.14	5.49	91 $\frac{3}{4}$
Graham-Paige .....	.....	0.10	Def.	0.47	Def.	54
Hudson	13.39	3.37	9.04	8.43	7.26	93 $\frac{1}{2}$
Hupp	3.10	2.87	2.22	7.18	2.29	72 $\frac{1}{2}$
Jordan	2.41	0.23	Def.	Def.	Def.	16 $\frac{1}{2}$
Mack	13.62	10.81	6.60	7.83	9.05	114 $\frac{3}{4}$
Marmon	8.00	5.84	1.05	4.62	3.00	104
Moon	11.03	1.25	Def.	Def.	Def.	32
Nash	5.57	8.50	8.30	7.63	6.60	118 $\frac{1}{4}$
Packard	0.77	1.05	0.78	1.46	1.68	23 $\frac{1}{8}$
Peerless	0.55	3.55	Def.	Def.	Def.	22 $\frac{1}{2}$
Pierce-Arrow	2.45	2.00	Def.	Def.	3.92	37 $\frac{1}{2}$
Reo	2.71	1.51	2.36	2.54	0.71	31 $\frac{1}{2}$
Studebaker	8.23	6.41	5.86	6.88	5.53	94 $\frac{1}{2}$
White	8.43	2.73	Def.	2.45	3.18	53 $\frac{1}{2}$
Willis-Overland	4.16	0.22	1.94	1.60	Def.	33 $\frac{3}{8}$
Yellow Truck	2.13	0.06	Def.	Def.	0.06	51 $\frac{1}{4}$

B. Tires

The rubber and tires industry is one in which it is very hard for even the strongest company to make money and keep it. Manufacturers have to contend with intense competition, the frequent ups and downs

of automobile manufacturers (who are their chief customers), and wild fluctuations in raw material prices. Crude rubber is even more speculative than tin in its price movements, and even the cotton used in tire fabric is way up one year and down the next. And so it usually happens that the profits of occasional prosper-years are mostly eaten up by inventory losses of ensuing years. Many of the financial statements issued by tire and rubber companies are, in fact, so gummed up with inventory adjustments that it is practically impossible to ascertain the real earnings for any single accounting period. Over longer periods of, say, five years or more a fair conception of earnings may be gained by adding total dividends (if any) to the net gain in surplus for the period. The result may be discomfiting to investors who have been relying upon officially reported earnings.

Group Forecasting

THE MAGAZINE OF WALL STREET's automobile group price index is, so far as we have discovered, the best barometer of the tire and rubber group price index. As will be observed from the accompanying chart, the two price indexes usually move simultaneously in the same direction, though tire stocks occasionally turn a few weeks later than the automobile group. Thus we find that the same curves used in forecasting automobile stocks also serve to predict turning points in the tire and rubber group.

Individual Stocks

1926 was an exceptionally bad year for tire manufacturers, as will be observed from the data in Table III. This was due to unusually heavy inventory write-offs occasioned by the historic crash in crude rubber prices upon breakdown of the Stephens restriction law.

TABLE III

PER-SHARE EARNINGS OF LEADING LISTED TIRE AND RUBBER STOCKS		(Compensated for Stock Dividends and Split-ups)				
Company	1925	1926	1927	1928	1929	1929 High
Ajax Rubber	2.01	Def.	Def.	Def.	Def.	11½
Firestone Tire & Rubber.....	.....	0.59	6.77	1.34	2.74	61¾
Fisk Rubber	5.93	2.23	1.08	Def.	Def.	20¾
Goodrich (B. F.).....	23.99	Def.	17.11	1.50	4.53	105¾
Goodyear Tire & Rubber.....	18.48	Def.	13.24	5.04	10.23	154½
Intercontinental Rubber	1.55	1.28	1.11	0.32	Def.	14½
Kelly-Springfield Tire	2.35	Def.	Def.	Def.	Def.	23¾
Lee Rubber & Tire.....	1.40	Def.	2.08	0.49	1.62	25
Miller Rubber	10.55	Def.	Def.	Def.	Def.	28¾
Norwalk Tire & Rubber.....	1.73	Def.	Def.	Def.	Def.	6¾
U. S. Rubber.....	11.21	.....	0.14	Def.	Def.	65

The three years, 1927-1929, may be regarded as fairly representative for the industry, and the Table shows that, of the eleven listed stocks, only four (Firestone, Goodrich, Goodyear, and Lee) enjoyed any earnings worth considering. Even these were obviously much overpriced at their 1929 highs. Stocks with erratic earnings, like those in the rubber group, are not worth more than about seven times average annual earnings, when valued as long term investments. On this basis, Firestone would be worth about 19, Goodrich 54, Goodyear 67, and Lee 10. At present writing these four are selling respectively at about 20, 37, 65, and 6.

These examples serve to show that considerations other than intrinsic values frequently lead to surprising speculative swings in the stock market. The short term investor has to pay a great deal of attention to the many exaggerated hopes and fears that play a very important rôle in the melodrama of price changes. It was exaggerated hopes of profits to be derived from the Zeppelin business, for example, that led the public to bid Goodyear up to 154 last year, when it was really worth only 67. And false hopes of an early recovery in business activity were largely responsible for the premature rally in the general market during the first four months of 1930. The market always shapes itself

eventually to facts, but its intermediate swings are frequently ruled by mere imagination and rumor. This explains why it is so difficult to predict the magnitude of coming market movements, although it is now quite possible in many instances to forecast their direction.

C. Accessories

Generally speaking, the accessories business enjoys a much more stable earning power than either tires or automobiles, despite its dependence upon activity of the latter. Many of the accessories companies are well protected by patents, so that competition is not so formidable as in other branches of the industry, and the fact that a great deal of the business is conducted under contract permits better planning of production and tends to stabilize prices. Quite a few companies, moreover, are cushioned during years of recession in the automobile industry by Ford orders whose output falls off less than that of other car makers at such times and sometimes even increases. At present writing the market is reflecting this comforting situation in such companies as Electric Auto-Lite, Bendix Aviation, Briggs Body, Kelsey-Hayes, Houdaille-Hershey, Midland Steel Products, and a few others. In the meantime Ford output for the first four months of the present year is running only 8% under last year against a decline for 53% for the remainder of the industry.

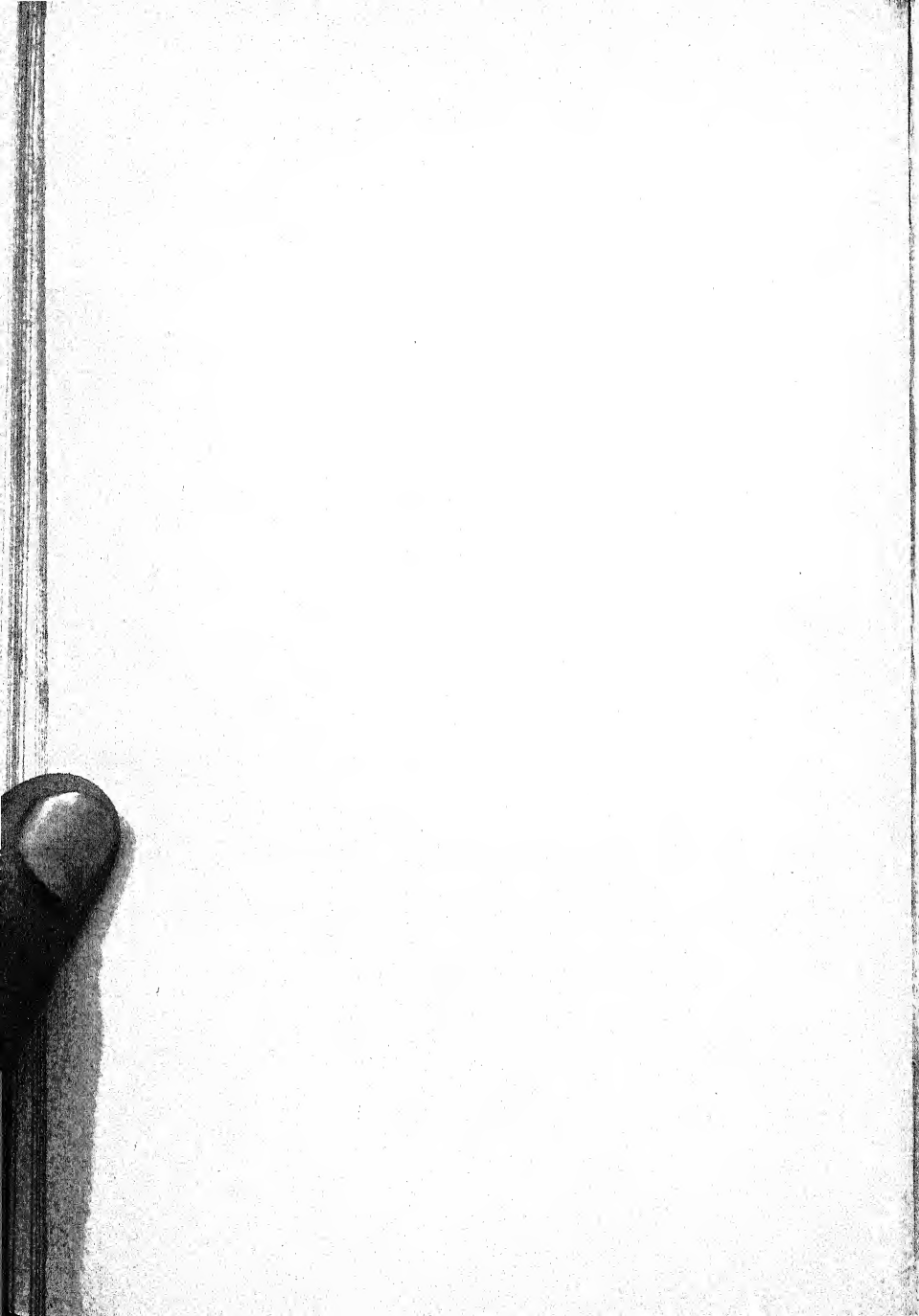
Group Forecasting

As might be expected, it will be noted from the accompanying Chart that the accessories group price index usually moves in the same direction as the automobile group, although occasionally it lags a few weeks behind. For this reason, the same barometers that are used to forecast turning points in the automobile group serve also for predicting the trend in accessories stocks.

TABLE IV
PER-SHARE EARNINGS OF LEADING LISTED ACCESSORIES STOCKS
 (Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Bendix Aviation .....	.....	2.83	2.31	4.44	3.53	104 $\frac{3}{8}$
Bohn Alum. & Brass.....	.....	2.53	3.38	9.10	7.43	136 $\frac{3}{4}$
Borg-Warner	2.52	3.05	3.86	6.47	6.04	93
Briggs Mfg.	4.07	4.08	0.58	2.15	1.21	63 $\frac{3}{8}$
Briggs & Stratton	1.26	1.70	1.33	3.55	5.00	43 $\frac{1}{2}$
Budd Mfg. ....	.....	Def.	Def.	1.27	0.98	22 $\frac{7}{8}$
Budd Wheel .....	.....	.....	0.26	0.18	1.84	21 $\frac{1}{4}$
Campbell, Wyant & Cannon	1.72	1.01	3.78	4.93	3.66	49 $\frac{1}{2}$
Continental Motors	1.52	1.15	0.78	1.04	0.43	28 $\frac{3}{8}$
Eaton Axle & Spring.....	2.70	3.85	3.12	5.29	5.16	76 $\frac{3}{4}$
Electric Auto-Lite	3.39	2.73	3.64	8.60	11.37	174
Gabriel Snubber "A".....	6.57	5.17	4.80	1.64	Def.	33 $\frac{7}{8}$
Hayes Body .....	.....	0.90	0.19	3.17	Def.	68 $\frac{3}{8}$
Houdaille-Hershey "B" .....	.....	.....	.....	3.54	4.64	52 $\frac{3}{4}$
Kelsey-Hayes Wheel .....	.....	.....	1.49	2.54	4.07	59 $\frac{3}{4}$
Marlin-Rockwell	4.75	3.15	2.69	6.94	7.43	89 $\frac{7}{8}$
Martin-Parry	1.62	4.14	0.04	Def.	Def.	18
Midland Steel Products....	.....	3.22	3.33	6.03	6.55	.....
Moto Meter Gauge & Equip.	.....	.....	.....	1.24	0.31	31 $\frac{3}{4}$
Motor Products	7.60	2.02	2.47	13.52	10.81	206
Motor Wheel	2.98	1.87	1.80	3.53	4.28	55 $\frac{1}{8}$
Mullins Mfg.	2.47	1.97	5.13	6.53	2.67	81 $\frac{1}{8}$
Murray Corp. of America .....	.....	.....	0.94	3.23	1.66	98 $\frac{1}{8}$
Raybestos-Manhattan .....	.....	.....	.....	3.65	4.74	58 $\frac{1}{2}$
Spicer Mfg.	5.05	4.51	2.94	6.46	5.09	66 $\frac{3}{4}$
Stewart-Warner	5.76	3.89	3.99	5.97	5.26	72 $\frac{3}{8}$
Thompson Products .....	.....	3.13	3.67	4.11	4.57	.....
Timken-Detroit Axle	1.16	1.74	1.51	1.81	1.28	34 $\frac{3}{8}$
Timken Roller Bearing.....	3.36	3.53	3.98	5.72	5.88	139
Trico Products.....	2.15	3.59	5.00	5.27	6.67	63
Wilcox-Rich "B"	1.67	2.63	2.91	3.08	3.84	62
Young Spring & Wire.....	2.59	2.20	2.25	4.55	5.36	59 $\frac{1}{4}$





CHAPTER IV

Public Utilities

THE term, "Public Utilities," covers that wide class of companies which operate under public franchise, and whose service charges are thus regulated by Federal or State Commissions, or both, according to whether their business is or is not interstate in scope. Under this heading are included motor transportation, street railway, telephone, telegraph, and water companies; and those which supply gas and electricity for power, heat, and lighting purposes. Railroads have been considered in a previous chapter.

The majority of public utility companies are privileged by law to operate as monopolies, and their rates are so regulated as to permit a fairly liberal return upon the property investment.

Special Investment Considerations

Aside from the usual factors that lead to changes in the market price of other stocks, such as merger projects, manipulative activities, and changes in dividend rates and per-share earnings, there are several special considerations that should be taken into account by the investor. These vary some according to the particular group in question; but, in a general way, it may be said that the most significant of these special considerations fall under the three main headings of politics, rate of growth, and changes in capitalization.

Public attitude toward the utilities, as reflected in political activities, is a matter of great concern. When the public's attitude is critical and hostile, and various

investigations and movements to reduce rates are in the air, public utility stocks are likely to lag behind the general market, and are thus unattractive as investments until sentiment again becomes more friendly. But when, as of recent years, politicians are content to leave the utilities to manage their own affairs, and even consent to rate increases as needed, then the utility stocks generally forge ahead of the Combined Average. From the beginning of 1926 to the end of July, 1930, for example, THE MAGAZINE OF WALL STREET's Public Utility group price index has risen 135% compared with an advance of only 4% in the Combined Average. The situation among traction companies, however, is by no means so favorable. Most of the leading traction stocks listed on the New York Stock Exchange are of companies operating in New York City, where all attempts thus far to raise fares to a profitable level have been resisted by political considerations. And so investors who take a position in the tractions must either rely solely upon their reading of the technical position, or else gamble on the whimsical turns of the political weather-vane.

The capital structure of many of our larger public utility companies, especially of the holding companies, is extremely complicated. Steps are continually being taken by such companies, however, to simplify their capital set up, and such changes frequently result in noteworthy changes in net income available for the parent company's common stock. When analyzing the earnings of a holding company it is essential to consider the consolidated income account. Earnings of the holding company alone consist chiefly of dividends received from subsidiaries, and thus convey only an incomplete idea of the stability and rate of growth of the system as a whole.

The rate of growth in per-share earnings varies greatly in different sub-groups and among individual companies of the public utility industry, as will be seen from inspection of Table V. Taking the country as a whole, it may be said that the gross income of trac-

TABLE V
PER-SHARE EARNINGS RECORD OF LEADING LISTED PUBLIC
UTILITY STOCKS
(Compensated for Stock Dividends and Split-ups)

Stock	A. Transportation		1928	1929	1929 High
	1926	1927			
Brooklyn-Manhattan Transit	6.30	6.62	6.52	7.00-e	81%
Chicago Yellow Cab.....	5.60	4.54	4.05	6.23	36
Hudson & Manhattan R.R.....	4.63	4.69	4.20	4.96	58¾
Interboro Rapid Transit.....	.....	.....	.....	Def.-e	58¾
Omnibus Corp. (The).....	0.16	0.39	0.27	0.40	107%
Third Ave. Ry.....	1.67	Def.	Def.	Def.-e	39
Twin City Rapid Transit.....	5.58	4.83	2.83	4.43	58¾
B. Telephone & Telegraph					
American Tel. & Tel.....	10.20	10.82	11.10	12.57	310¾
International Tel. & Tel.....	4.04	3.69	3.42	3.03	149¾
Pacific Tel. & Tel.....	12.06	7.16	10.77	11.51	220
Western Union Telegraph.....	15.24	15.06	15.11	15.12	272¾
C. Other Holding Companies					
Amer. & Foreign Power.....	0.17	0.69	1.22	4.00-e	199¾
Amer. Power & Light.....	3.40	3.56	3.93	5.12	157
Amer. Water Works & Elec.....	2.09	2.16	2.95	3.90	194¾
Columbia Gas & Electric.....	2.21	1.69	2.23	2.49	112
Commonwealth & Southern.....	0.35	0.45	0.58	0.75	24¾
Electric Power & Light.....	1.45	2.09	2.37	2.98	86¾
Federal Light & Traction.....	2.03	1.84	2.66	2.89	105¾
International Hydro-Electric "A" .....	.....	.....	3.13	3.60-e	59½
Louisville Gas & Elec. (Del.) "A"	2.14	2.06	2.38	2.39	72¾
National Power & Light.....	.....	1.59	1.93	2.17	71¾
North American Co.....	2.86	3.17	4.09	4.81	177¾
Public Service Corp. of N. J.....	2.52	2.30	3.51	3.99	137¾
Standard Gas & Electric.....	8.46	6.60	6.63	7.01	243¾
United Corp. ....	.....	.....	.....	0.49	75½
United Gas Improvement.....	.....	1.16	1.27	1.46	61½
Utilities Power & Light "A".....	2.90	2.22	2.42	2.39	58¾
D. Other Operating Companies					
Brooklyn Union Gas.....	7.85	7.66	8.09	7.66	248¾
Consolidated Gas Co. of N. Y.....	.....	3.99	4.52	4.75	183¾
Detroit Edison Co. (The).....	12.34	11.65	14.05	12.62	385
Pacific Gas & Electric.....	2.61	2.86	3.17	3.52	98¾
Pacific Lighting .....	.....	4.30	4.22	4.54	146½
Peoples Gas Light & Coke.....	12.12	11.94	12.16	12.01	404
Southern California Edison.....	2.68	3.10	3.02	3.36	93¾

e Estimated.

tion companies has practically ceased growing, so that the moderate increases in net which have been reported of recent years are the outcome solely of a somewhat better control over operating expenses. Telephone companies could undoubtedly show a gratifying annual increase in per-share earnings if they did not consider it politically and economically expedient to create the impression of stationary earnings by charging improvements to expense, by periodic issuance of rights to stockholders, and by occasional readjustments of rates.

Electric Light and Power Companies

A recent survey shows that the United States, with about eleven billion dollars invested in electric power plants, produced about 41% of the world's total of 300 billion kilowatt-hours of electric power in 1929.

Industry here is about 75% electrified. Germany comes next with about 70% of her industries electrified, and then England with about 50%. In per capita consumption of electric power, however, Canada ranks first with 1,845 kilowatt-hours per annum. We are second with 813 kilowatt-hours per capita per annum.

The great majority of public utility stocks listed on the "Big Board" are of large integrated companies, operating not only electric light and power companies but also gas, water and traction services. Most of these cover such a wide territory that they are well protected against sudden fluctuations in earnings. Their diversification of activity is not only economic but geographic. The growth of such companies during the past thirty years has been phenomenal. The output of electric energy is indeed increasing so much more rapidly than the population that it has been possible to reduce rates and yet show ever mounting net profits. More and more homes are every year becoming electrically

lighted, more and more electric household appliances are being installed, and more and more electric power is being used in industry. Growth in sales of electric power for industrial purposes has been greatly stimulated by the policy of making the price to large consumers so low that it does not pay them to install and operate isolated plants of their own.

It is worth noting that the earnings of some individual companies increase at a more rapid rate than those of the industry as a whole; largely because such companies are committed to a policy of expansion, either through reinvestment of profits or by acquisitions through exchange of stock. In instances where such expansion is very rapid it may result in a temporary drop in per-share earnings while expenses of new acquisitions are being written off, or until newly constructed plants begin to show adequate returns upon the investment. These intervals of growing pains merely afford to the alert investor some rare opportunities to pick up bargains.

Thus we find that sources of expansion in per-share earnings of leading electric light and power companies are threefold: acquisitions, increase in population, and growth in per-capita use of electricity. There is little indication that per-share earnings of these companies are even approaching the saturation point. On the contrary, the output of electric energy in this country is so far from having reached the saturation point that it continues to mount—although at a somewhat slackened pace—even during periods of recession in the industrial cycle. With an increasing proportion of electric power taken by industrial plants, it is reasonable to expect, however, that future industrial depressions will be accompanied by a somewhat more conspicuous falling off in the consumption of electric current.

Market Indicators

There are no satisfactory economic barometers to aid the spec-vestor in forecasting market movements of any of the public utility groups, although these stocks do conform fairly well with important swings in the Combined Average. Public Utility stocks have been in relatively great demand of recent years, however—especially by investment trusts—so that there has been a pronounced tendency for the utilities to rise more rapidly and turn downward later than the general market during periods of strength, and to decline less, or not at all, when there are reactions in the Combined Average. Spec-vestors in individual Utility stocks may use monthly earnings reports and technical position readings advantageously in their operations.

Durand Valuations

In the absence of reliable economic barometers for forecasting group movements in the utility stocks this appears to be an opportune time to fulfill our earlier promise to explain briefly how the approximate investment value of a common stock is computed by the Durand method. It is obviously of great value to both investors and speculators to know about what a stock is worth intrinsically; for market prices and values almost invariably come together eventually.

The Durand method of evaluating common stocks is of especial importance because it enables one to estimate a quantitative value for stocks, where most other methods give only comparative or guess-work values. In order to show how easy it is to compute investment values by the Durand method, we shall merely show here, step by step, how it is done, without entering into intricate explanations of why. Readers with mathematical training, who are interested in delving into the

subject more deeply, will do well to study Chapter IV of John Durand's recent book: *How to Secure Continuous Security Profits in Modern Markets*.

The steps by which Durand valuations are computed are, in order, as follows:

1. Tabulate the yearly per-share earnings for a series of years back, based upon *actual*, not *average*, number of shares outstanding at end of the year.

2. List, by years, full particulars as to all stock dividends, rights, and split-ups during period covered by the earnings tabulation.

3. Compensate the per-share earnings for all of these gifts to stockholders. (Per-share earnings shown in the many tables of this volume have been so compensated.)

Example 1:—North American Co. reported per-share earnings of 4.50 in 1928 and 4.81 in 1929. The Company pays regular stock dividends of $2\frac{1}{2}\%$ quarterly (about 10% per annum, if compounded); but no cash dividends. Thus stock was diluted in 1929 by about 10%. Had the same amount of stock been outstanding at the end of 1928 as at the close of 1929, per share earnings would have been 4.50 divided by 1.10—namely 4.09 (as shown in Table V)—compared with 4.81 on a comparable basis. 4.09 is thus the per-share earnings for 1928, compensated for stock dividends of 1929. In a similar manner per-share earnings of previous years are compensated for successive stock dividends. Reported per-share earnings for 1927, for instance, would be divided by 1.10, and the result again divided by 1.10.

Example 2:—American Tel. & Tel. reported the following per-share earnings on actual number of shares outstanding at end of year: 1927, 11.66; 1928, 11.10; 1929, 12.57. During 1928 the Company offered to stockholders the right to subscribe, at 100, to 1 new share

for each six shares held. Now, the right to subscribe to stock below market price always conceals a stock dividend which, in this instance, would be determined as follows: Each right entitled the holder to subscribe to $1/6$ th of a share for the sum of \$16.67 (\$100 divided by 6). The stock opened, ex-rights, at 187; at which price the same \$16.67 would have purchased in the open market $16.67 \div 187$, namely 0.0892 share. The difference between $1/6$ th, or 0.1667th, of a share and 0.0892th of a share—namely, 0.0775th of a share, constitutes a concealed stock dividend of 7.75%. Consequently the reported per-share earnings of 11.66 for 1927, should be compensated by dividing by 1.0775, which gives 10.82 as the compensated earnings for that year, as shown in Table V. A simpler method of computing the concealed stock dividend is as follows: On the day the stock opened at 187, ex-rights, the rights opened at $14\frac{1}{2}$. By selling the rights, the \$14.50 in cash thus realized would have purchased 0.0775 share at 187 in the open market.

4. After tabulating the compensated earnings for a series of years, it will usually be found that, during the period, there were two years of peak earnings, separated by several years of lesser earnings. Earnings for these two peak years should be used for purposes of computing the average annual rate of increase in per-share earnings.

Example 3:—Compensated per-share earnings of American Tel. & Tel. stock were as follows: 1925, 10.31; 1926, 10.20; 1927, 10.82; 1928, 11.10; 1929, 12.57. Hence 1925 and 1929 are the two peak years between which per-share earnings should be compared.

5. Express the average annual per-share increase in earning between peak years as a percentage of per-share earnings for the latest peak year.

Example 4:—Per-share earnings in the peak year, 1929, were 12.57: for the peak year, 1925, they were 10.31. Hence the 4-year increase in per-share earnings was 2.26 (12.57 minus 10.31), and the average annual increase was $\frac{1}{4}$ th of 2.26—namely, 0.565—which is 4.42% of the latest peak earnings of 12.57 in 1929.

6. Next determine what rate of cash dividends the company can reasonably be expected to continue during the coming year in view of current and prospective earnings.

Example 5:—American Tel. & Tel. has paid \$9.00 for years, and will doubtless continue to do so during the coming year.

7. In instances where the company pays no cash dividends, or a dividend that is higher or lower than seems safe or reasonable in view of current and prospective earnings, assume a rate of cash dividend that would seem reasonable under the circumstances.

Example 6:—North American Co. pays 10% in stock; but no cash dividends. The Company could, in reason, discontinue stock dividends and pay cash dividends at the rate of \$3.00 per annum.

8. To find the investment value of most industrial (except mining and oil) and public utility stocks: multiply the average annual per cent increase in per-share earnings by 2; add 14; and multiply the normally reasonable cash dividend by the result.

Example 7:—North American earned 2.86 in 1926, and 4.81 in 1929. The three-year increase was thus 1.95, and the average annual increase 0.65, which is 13.5% of 1929 earnings. Two times 13.5 is 27. 27 plus 14 is 41. 41 times the normally reasonable dividend of \$3.00 (Example 6) is 123—or 125, in round numbers.

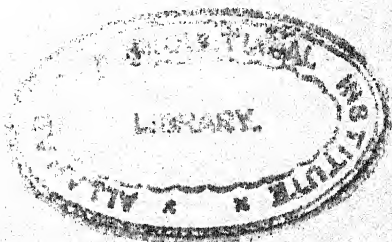
In step (8) the multiplier, 14, gives that part of the investment value which is derived from a current

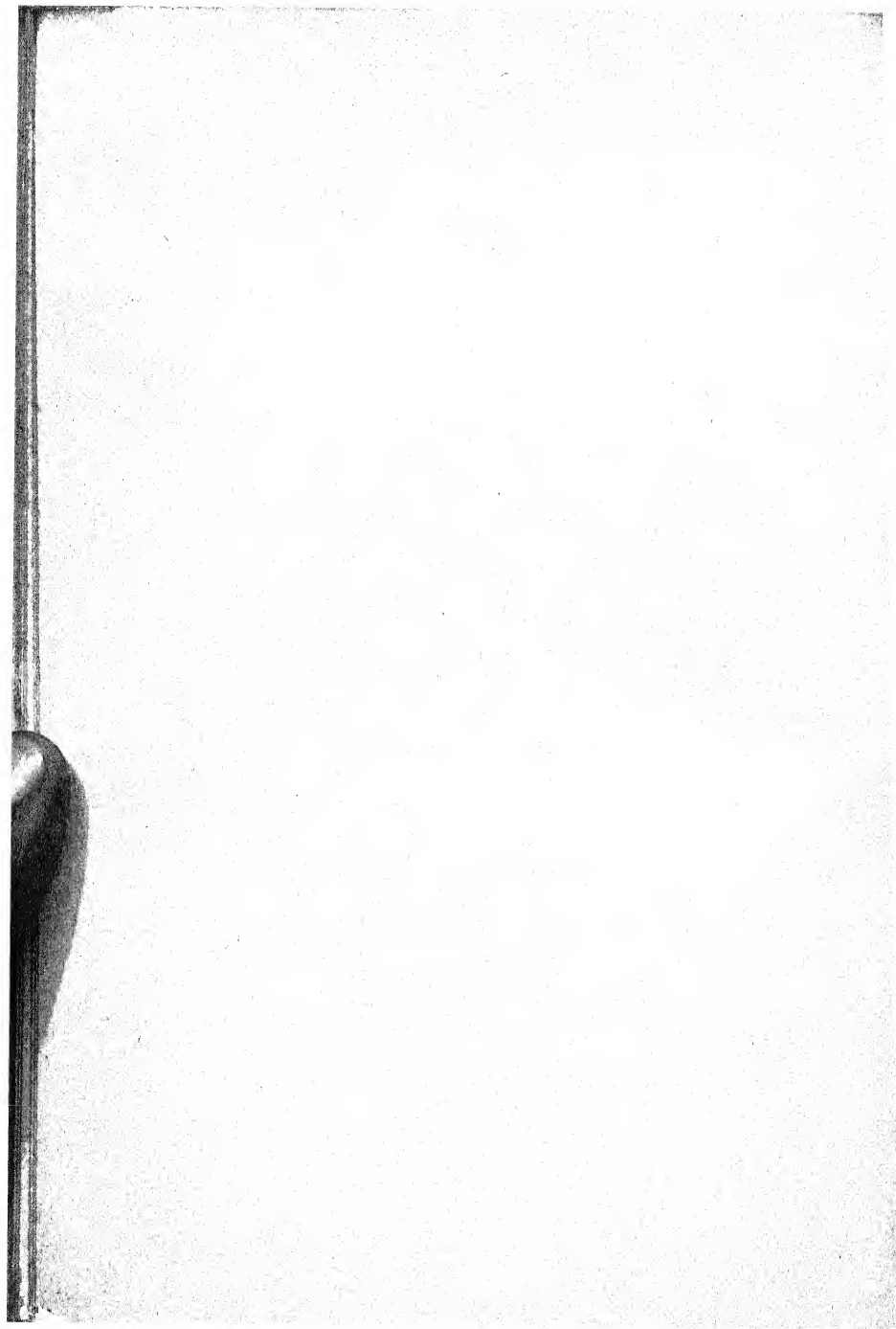
yield of 7%, which is about right for the average common stock. To prove this it need only be observed that a stock which sells for 14 times the cash dividend yields about 7%. The other term in the multiplier (2 times the average annual rate of increase in per-share earnings) allows for the speculative profit to be derived from market appreciation in the stock on account of increasing earnings. The two together give a computed investment value upon which the true yield will be about 7%, including cash dividends and profits on the investment.

On exceptionally high grade investment common stocks, such as the four telephone stocks listed in Table V, investment values may be computed for a true yield of 5%. In such instances the average annual rate of increase in per-share earnings should be multiplied by 4 and the product added to 20 in order to determine the dividend multiplier. For a true yield of 6%: the average annual rate of increase in per-share earnings should be multiplied by 3, and the product added to 17 to determine the dividend multiplier.

Example 8:—Average annual rate of increase in per-share earnings for American Tel. & Tel. stock has been 4.42 (Example 4). 4 times 4.42 is about 17.7. 17.7 plus 20 is 37.7. 37.7 times the \$9 dividend is 340, which is what the stock is worth on a 5% true yield basis. It will be an interesting exercise for the reader to verify that the stock is worth about 275 on a 6% true yield basis, and about 205 on a 7% true yield basis. In this connection it seems well worth observing that the average annual market value of telephone rights over the past ten years has been about \$4.60. Adding this to the \$9.00 cash dividends, gives an equivalent cash dividend of \$13.60; which, capitalized at 5%, gives a value of about 270 for the stock.

In view of the extensive rise which has taken place in public utility stocks as a group, and in view of the present differences of opinion as to whether these issues are currently selling too high or too low, it should be both interesting and profitable to compute the intrinsic value of utilities by this formula.





CHAPTER V

Railroads

EXCEPT in isolated instances, the days are gone when fortunes could be made through long term investments in railroad stocks. Back in the 80s, when the construction of new railroad mileage was at its height, transactions in the rails practically dominated business on the Stock Exchange. Today the turnover in railroad shares is scarcely 5% of the total. The huge steel network of steam drawn trains now reaches all corners of the country. There is little need for further expansion in track mileage, and even the volume of traffic handled seems to have nearly reached a point of saturation, viewing the country as a whole.

That railroad operating revenues have failed of recent years to keep pace with the rapid growth in gross income of public utility and industrial companies is attributable to a number of causes, in addition to cessation in the construction of new mileage. Chief among these retarding influences have been the inroads made by automobiles and busses into the short haul passenger and freight traffic, and the growing tendency for manufacturers to locate nearer the sources of their raw material. A study presented on page 123 of "The New Technique of Uncovering Security Bargains" discloses, in fact, that the number of tons of raw material transported by the railroads in 1926 was only 18% larger than in 1913; whereas freight tonnage consisting of the products of manufacture rose nearly 40% during the thirteen-year interval.

Further analysis of developments during this same thirteen-year period brings out the significant facts that the 50% increase in railroad passenger revenues witnessed since pre-war days has come solely from a 50% increase in average fares; whereas the 120% growth in freight revenue has been the composite outcome of a 22% increase in total tonnage handled, a 48% rise in average freight rates, and a 22% lengthening of the average haul. This points clearly to the inference that traffic rates are the dominant factor in the shaping of railroad income.

Changes in the general level of traffic rates are of rare occurrence and are preceded by protracted hearings before the Interstate Commerce Commission, which afford the investor ample warning to be on the lookout. Adjustments of minor character are ordered by the Commission from time to time; but these usually have little effect upon income as a whole.

While railroad stocks as a class no longer present so many attractive long pull investment opportunities as may be found among the industrials and utilities, there are still a few desirable issues which, for special reasons, appear now to be well worth buying and holding for a number of years.

Recapture

The recapture clause of the Transportation Act of 1920 has for the past decade been one of the restraining influences which has kept railroad common stocks from selling on as high a times-earnings basis as the utilities and industrials. Last year's Supreme Court decision directing the Commission to give due weight in its valuations to cost of reproduction has, however, taken some of the curse out of this clause, and what is left of the ominous shadow now seems likely to be dissipated by the legal difficulties anticipated in col-

lecting any surplus earnings. It is quite possible that Congress may eventually repeal the clause altogether.

Group Movements

Passenger revenue, which amounts to about one-sixth

TABLE VI
PER-SHARE EARNINGS RECORD OF LEADING LISTED RAILROAD STOCKS
(Compensated for Stock Dividends and Split-ups)

	1926	1927	1928	1929	1929 High
Atch., Top. & Santa Fe.....	23.42	18.74	18.09	22.69	298½
Atlantic Coast Line.....	24.07	11.96	10.24	14.47	209½
Baltimore & Ohio.....	17.20	9.42	12.43	10.31	145½
Bangor & Aroostook.....	8.69	8.41	6.94	8.46	90½
Canadian Pacific.....	3.53	3.02	3.74	2.79	467½
Central R. R. of N. J.....	15.92	19.25	22.06	18.38	360
Chesapeake & Ohio.....	24.75	24.19	24.43	21.69	279¾
Chicago & Alton.....	Def.	Def.	Def.	Def.	194
Chic. & Eastern Illinois.....	Def.	Def.	Def.	Def.	43
Chic. Great Western.....	Def.	Def.	Def.	Def.	23¾
Chic., Milw., St. Paul & Pac.....	.....	.....	2.81	0.95	44¾
Chic. & Northwestern.....	6.92	5.28	6.62	8.85	108½
Chic., R. I. & Pac.....	10.67	12.08	12.89	14.04	143¾
Colorado & Southern.....	13.45	8.38	11.37	9.24	135
Delaware & Hudson.....	19.27	5.97	12.38	15.14	226
Del., Lack. & Western.....	10.61	9.31	7.77	7.90	169¾
Erie.....	6.72	0.63	4.93	6.03	93½
Great Northern Pfd.....	10.42	9.24	10.11	10.31	128½
Illinois Central.....	12.06	8.14	8.94	9.13	153½
Kansas City Southern.....	4.81	3.53	7.02	8.47	108¾
Lehigh Valley.....	8.27	3.52	5.48	6.08	102¾
Louisville & Nashville.....	16.60	14.29	12.24	11.73	154¾
Missouri-Kansas-Texas.....	5.54	4.08	4.62	5.10	65¾
Missouri Pacific.....	6.09	0.98	7.15	10.42	101¾
New York Central.....	14.52	13.90	10.86	16.89	256½
N. Y., Chic. & St. Louis.....	21.40	15.36	12.66	15.51	192¾
N. Y., N. H. & Hartford.....	4.63	5.50	8.00	11.72	132½
N. Y., Ontario & Western.....	1.33	0.01	Def.	Def.	32
Norfolk Southern.....	5.08	4.63	3.79	2.17	48½
Norfolk & Western.....	25.76	21.31	21.25	29.06	290
Northern Pacific.....	8.47	7.48	8.52	8.79	118¾
Pennsylvania.....	6.77	6.83	7.34	8.82	110
Pere Marquette.....	14.47	13.31	16.17	13.94	260
Pittsburgh & West Virginia.....	8.66	5.67	6.74	6.89	148¾
Reading Co.....	11.24	7.64	9.06	9.08	147¾
St. Louis-San Francisco.....	14.91	11.29	10.88	11.82	133¾
St. Louis Southwestern.....	8.63	5.22	4.68	0.64	115¾
Seaboard Air Line.....	4.71	Def.	Def.	Def.	21¾
Southern Pacific.....	10.42	9.05	10.48	12.74	157½
Southern Ry.....	17.16	14.41	12.53	11.65	162¾
Texas & Pacific.....	7.08	7.55	17.57	12.76	181
Union Pacific.....	16.65	16.05	18.95	20.37	297¾
Wabash.....	5.96	1.78	4.22	5.67	81¾
Western Maryland.....	3.27	3.32	1.59	2.65	54
Western Pacific.....	Def.	Def.	Def.	Def.	41¾
Wheeling & Lake Erie.....	6.11	2.80	8.65	9.60	118

of total railroad operating revenues, does not fluctuate greatly from one year to another; though there has been a steady falling off in this source of income since 1920. Railroad freight traffic, on the other hand, is subject to quite violent ups and downs along with corresponding fluctuations in the industrial cycle. For this reason it is somewhat surprising to find that market movements in railroad common stocks as a group do not correspond very well with changes in either car loadings, operating revenues, or net operating income. In fact there is no reliable industrial barometer for the railroad group. Readers of THE MAGAZINE OF WALL STREET have doubtless observed, however, that turning points in the railroad group price index almost always occur simultaneously with turning points in THE MAGAZINE'S Combined Average; so that barometers used to forecast the latter also enable one to predict the trend of railroad common stocks as a group.

On the other hand, a curve of car loadings, expressed in percentages of corresponding loadings the year before, serves as an excellent barometer for predicting the trend of both operating revenues and net operating income, when these curves are also expressed in percentages of the year before. Turning points in both the gross and net income curves usually take place about a month later than corresponding turning points in the car loadings curve. Even magnitudes of the two income curves can be estimated from the car loadings curve; for percentage changes in operating revenues are about equal to corresponding percentage changes in the car loading curve, and swings in the net operating income curve are in magnitude about three and a half times as great. The reason for the wider swings in net is obviously due to the

fact that operating expenses are, on an average, about 70% of operating revenues.

Selecting the Stock

The best time to buy railroad stocks is when indications point to a coming rise in the general market, especially if conditions also favor a prolonged period of low interest rates. Investors who aim to keep their funds working at maximum efficiency should dispose of their stocks when the move is over.

Having decided that the time is propitious for investing in railroad stocks, the next task is one of selection from the many possibilities. If immediate cash income is the chief consideration, one would choose some stock with a relatively high yield after thorough investigation of the outlook to make sure that the current rate of dividend can be maintained. At present writing the yield on sound railroad investment stocks is abnormally high, as an aftermath of the recent bear market; but, under normal conditions, a high yield should of itself warn one to investigate with exceptional care before buying. Most investors today, however, prefer to sacrifice immediate income for an opportunity of increasing their principal. For such investors, merger possibilities and the outlook for increased earnings rank next in importance to the trend of the general market.

Within the past few months (1930) the Interstate Commerce Commission has, after long deliberation, proposed a plan for unifying the many railroads of the country into 21 great systems—seven in the East, three in the South, and eleven in the West. Insofar as this plan would affect railroads whose stocks are listed on the "Big Board," the proposed grouping is as follows:

EASTERN SYSTEMS

- 1—*Boston & Maine*
Boston & Maine
Delaware & Hudson
Bangor & Aroostook
Rutland (part of)
- 2—*New Haven*
N. Y., New Haven & Hartford
N. Y., Ontario & Western
- 3—*New York Central*
New York Central
Michigan Central
Big Four
Rutland (part of)
- 4—*Pennsylvania*
Pennsylvania
- 5—*Baltimore & Ohio*
Baltimore & Ohio
Reading
Jersey Central
Chic. & Alton
Buffalo, Rochester &
Pittsburgh
Chic., Indianapolis & Louis-
ville (half interest)
- 6—*C. & O.—Nickel Plate*
Chesapeake & Ohio
Nickel Plate
Pere Marquette
Del., Lack. & Western
Erie
Hocking Valley
- 7—*Wabash—Seaboard*
Wabash
Seaboard Air Line
Lehigh Valley
Pittsburgh & West Virginia
Wheeling & Lake Erie
Western Maryland
Ann Arbor
Norfolk & Western

SOUTHERN SYSTEMS

- 8—*Atlantic Coast Line*
Atlantic Coast Line
Louisville & Nashville
Nashville, Chattanooga &
St. L.
Gulf, Mobile & Northern
Chic., Ind. & Louisville
(quarter interest)

- 9—*Southern*
Southern Ry.
Norfolk Southern
Chic., Ind. & Louisville
(quarter interest)

- 10—*Illinois Central*
Illinois Central
St. Louis Southwestern
Minneapolis & St. Louis

WESTERN SYSTEMS

- 11—*Chicago & North Western*
Chicago & North Western
Chic. & Eastern Illinois
Chic., St. P., Minn. & Omaha
- 12—*Great Northern—Northern Pacific*
Great Northern
Northern Pacific
- 13—*Milwaukee*
Chic., Mil., St. P. & Pac.
- 14—*Burlington*
Chic., Burlington & Quincy
(not listed)
Colorado & Southern
Missouri-Kansas-Texas
Green Bay & Western
- 15—*Union Pacific*
Union Pacific
Kansas City Southern
- 16—*Southern Pacific*
Southern Pacific
- 17—*Santa Fe*
Atchison, Topeka & Santa Fe
Chicago Great Western
- 18—*Missouri Pacific*
Missouri Pacific
New Orleans, Texas & Mexico
Texas & Pacific
Denver & Rio Grande Western
Western Pacific
- 19—*Rock Island—Frisco*
Chic., Rock Island & Pacific
St. Louis-San Francisco
- 20—*Canadian National*
Canadian National lines in
New England
- 21—*Canadian Pacific*
Canadian Pacific Lines in
New England
Minn., St. P. & Sault Ste.
Marie
Duluth, South Shore &
Atlantic

The foregoing classification conveys only the barest outline of the complicated questions that must be

settled before railroad unification becomes an accomplished fact in this country. It is the plan now favored by the Commission; but will doubtless meet with considerable opposition in some instances. The fight for control of strategic lines has not yet been settled, and may flare up from time to time for several years to come, thereby offering to the alert investor some interesting opportunities for profits—always provided that he keeps posted continually on the intricate ramifications of the problem, and makes a close study of the market position of railroad stocks that are likely to be involved in the contest.

In estimating the likelihood of increasing earnings it is essential to observe the character of freight handled by individual roads and to note how widely the tonnage of specific commodities fluctuates from one year to another, especially under influence of changes in the industrial cycle. Shipments of metals and metal products are extremely sensitive to changes in business activity; next in reputation for wide fluctuations are the products of forest and quarries, used in the building industry; and then comes bituminous coal. On the other hand, Nature is more often responsible than business for year-to-year fluctuations in agricultural tonnages. Where one class of commodity preponderates in the freight tonnage—such as wheat, or coal, or potatoes, or automobiles, or timber, or metals—earnings are likely to fluctuate more than where the tonnage is well balanced. Sometimes the establishment of a new industry along the line, or the consummation of new traffic connections, will add considerably to a road's earnings.

The item, "Other income," or "Non-operating income," may also be of much importance in individual instances. This source of income is net, and not subject to recapture. It is usually made up largely of

interest and dividends on securities held as investments, or for control, and does not vary greatly from year to year, except for alterations in the investment portfolio, or when there are changes in the rate of dividends paid on stock owned.

Operating Expenses

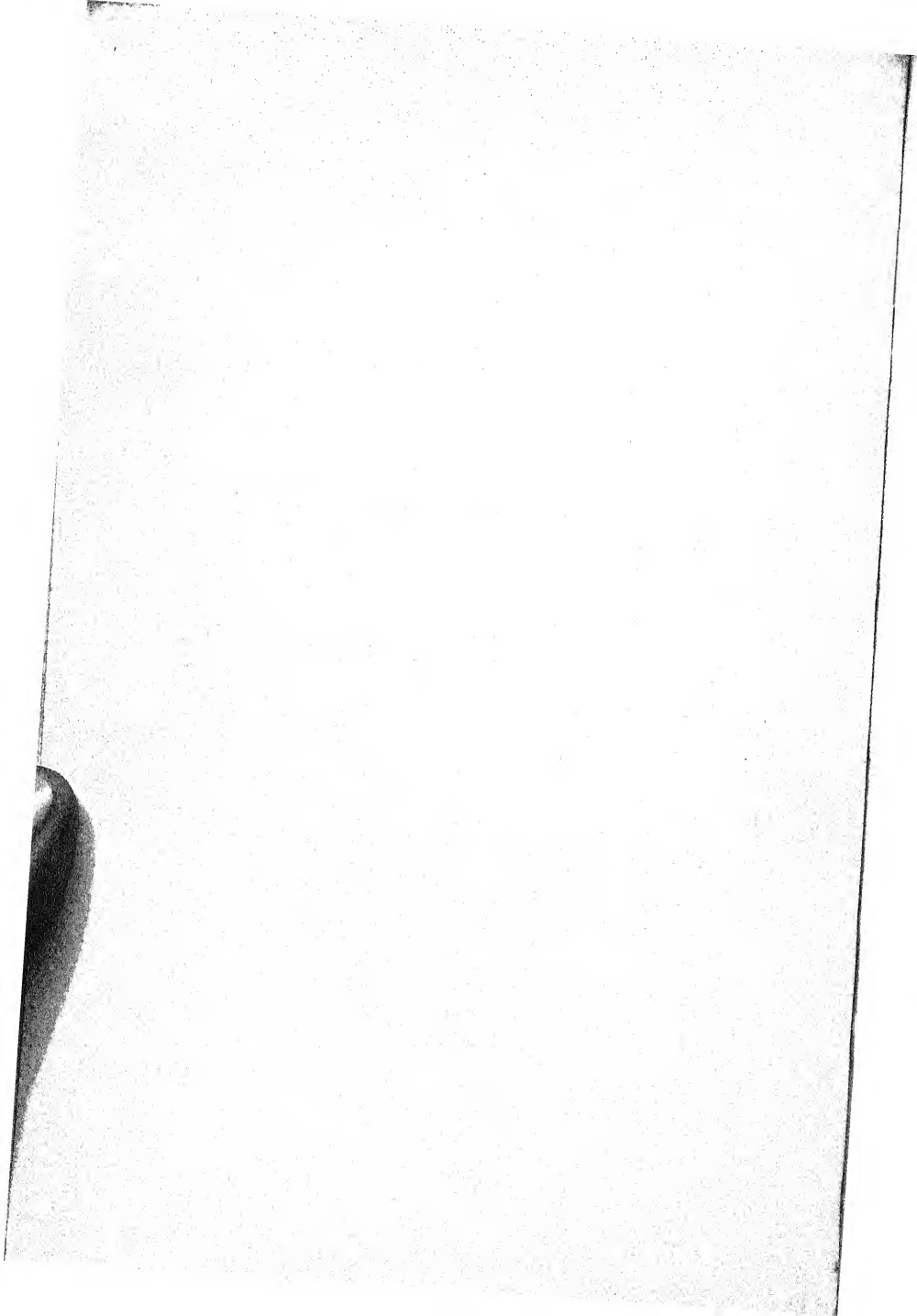
Another item that the investor needs to watch with special interest, in his analyses of individual roads, is expenditures for maintenance of way and equipment. A large portion of this outlay is not obligatory in any one year; so that many roads during lean years, and all roads with chronically poor earnings, skimp on maintenance charges, sometimes to the extent of inadequate upkeep. When earnings improve, the opportunity is grasped to bring roadway and equipment into efficient condition, and maintenance expenditures will run abnormally high for a period. This is known as "Flowing back earnings into the property." So long as the outlay for maintenance remains abnormally high, net earnings will fail to reflect the full improvement in operating revenues; but as soon as the improvement campaign is completed, maintenance expenditures will be reduced to a normal level, perhaps even below normal for a period, and the outcome will be a sudden marked improvement in net income, which will find reflection sooner or later in the market price of the stock.

Interest Rates and Commodity Prices

About a third of railroad operating expenses, on an average, goes for fuel, supplies, and other material. Conspicuous or prolonged changes in the level of commodity prices therefore exert considerable influence upon profits, and thus upon the market prices of railroad securities.

One reason for the sluggish response made by railroad securities to changes in per-share earnings is to be found in the comparative stability of dividend payments. Most well managed roads build up a surplus in boom times from which dividends are maintained in years of diminished earnings. It is due to this stability of dividends that railroad common stocks tend to sell, like preferred stocks, on a yield basis rather than on a times earnings basis. This means that, in normal markets, railroad stocks tend to rise more rapidly than the general market when interest rates are low, and decline more rapidly than the Combined Average when interest rates are high.

At present writing, railroad stocks are under the doubly favorable influence of low interest rates and low commodity prices; so that it seems safe to predict a strong market for railroad stocks as soon as the general market resumes its upward course. Not since 1921 has there been a more favorable opportunity than now to buy sound railroad securities for long pull investment.



CHAPTER VI

Mining

PRACTICALLY all of our material wealth is created through the application of capital and labor to raw material that comes from the ground. So far back as history records, mankind has had to contend with inequalities in the rate at which Nature yielded this raw material upon which depended his well-being. Prior to the industrial age, years of plenty would alternate with seasons of crop failure, famine and pestilence. With the development of world-wide steam transportation, the distressing consequences of local crop failures are now mitigated by prompt shipment of surplus agricultural products to regions in which there happens to be seasonal shortage. In the meantime new areas have been opened to crop production, and the rapidly spreading use of agricultural machinery has so added to the efficiency of farm labor that the Malthusian bugaboo of world food shortage has been transformed into this year's actuality of over-production.

But while machinery has been busily engaged in smoothing out the effects of local irregularities in agricultural production, it has ushered in another type of fluctuation which we call the "Industrial cycle." Our machine age is as dependent upon products of the mines as the agricultural age that preceded it was upon products of the soil. An even flow of oil, coal and metals from the ground into consumption is today just as essential to the stability of business activity as an even flow of grain from the fields into hungry mouths used to be in biblical times.

An even flow of raw materials from the ground into consumption would become possible only under conditions of uniform demand and a steady supply. To attain this involves difficulties which man, still the servant of fickle Nature, has not yet been able to surmount. With agricultural products, the demand seems susceptible of control; but the supply still fluctuates erratically with varying weather conditions, despite the leveling influence of geographic diversification. Production in the "extractive" (petroleum and mining) industries will doubtless be brought under control some day; but the demand, which springs from millions of impulsive and unorganized human beings, may never become subject to regulation. About the most that can be expected for many years to come by way of ameliorization in the business cycle is further progress in the promptness and comprehensiveness of business statistics, and a better understanding of the economic machinery which governs the ups and downs of industry, in order that those among us who are more alert than the average may profit by the excesses of others.

Inventories

There is probably no phase of business statistics that affords a clearer picture than inventories as to the current condition and outlook in industry and the stock market. When inventories are increasing, it means that supply is exceeding demand; and when inventories decrease, it shows that consumption is running ahead of production. Decreasing inventories are therefore a favorable indication, and are usually followed by rising prices for the commodity, increasing profits in the industry, and advancing prices for the securities of companies connected with the industry. Rising inventories lead to just the opposite chain

of developments. Falling inventories at a time when production is increasing are almost always accompanied by sharply rising prices for the commodity and for common stocks connected with the industry. Rising inventories in conjunction with curtailed production disclose very unhealthy conditions in the industry, and should serve as a warning to investors.

In analyses of inventory statistics we have to make the best of partial glimpses of the field. The only figures that can be collected and published promptly cover merely the so-called "Visible supply," which consists of stocks held by producers, and sometimes also by the larger distributors. In some industries the *invisible* supply, in consumers' hands, is of even greater importance but can not be ascertained. The latter difficulty is encountered especially in studies of agricultural products, such as wheat, sugar, and coffee, where consumers are too numerous to be canvassed effectively.

Producers of the basic commodities which are taken up in this chapter, as well as the manufacturers who use these metals as raw material, are so few in number that the respective trade associations of these industries have succeeded in gathering quite comprehensive statistics of both inventories and production, and now publish the figures with reasonable promptness. We shall take copper to illustrate the method of making practical use of such statistics.

A. Copper

About 80% of the world's copper comes from mines located in North and South America, which are nearly all controlled by capital in the United States. In fact mines connected with the Anaconda and Kennecott groups alone turn out, respectively, around 20% and 21% of the world's copper. During the past twenty

years world consumption of the red metal has nearly doubled. Half of the output is taken by the electrical industries, whose gross income doubles about every five years. In view of these facts there seems little occasion to fear that the new Rhodesian mines, about which so much is being heard just now, will disorganize the industry. But should the output from these African mines ever develop into a real menace to the price structure it would not be surprising to see their control pass into American hands.

The important considerations for an investor in mining stocks to have in mind are outlook for the industry, discovery of new deposits, and unit operating costs. For income tax purposes it is customary for mining and oil companies to write off liberally for depletion; but reports of net earnings made to stockholders are generally stated to be "before depletion." Depletion is merely a bookkeeping reserve set up to offset the loss of capital assets occasioned by withdrawal of deposits from the ground; so that the amount of cash available for distribution to stockholders is approximately equal to earnings before depletion. Most mining companies make a practice of distributing to stockholders nearly all that is earned before depletion, and so seldom accumulate much of a surplus. This explains why mining companies pay out each year in dividends considerably more than they actually earn. The excess is paid out of depletion reserves and is equivalent to a partial repayment of the investment. It is customary, when mailing dividend checks, for the company to state how much of the amount constitutes a distribution of assets; for that portion of the so-called "Dividend" is exempt from income taxes, both corporate and personal.

Theoretically, at least, the life of an oil or mining company is limited and its stock ought to sag gradually

in market price over a period of years as proceeds from the sale of deposits are distributed to stockholders. For this reason oil and mining stocks usually sell on a higher yield basis than the stocks of other companies which are commonly assumed to be immortal. And so we find that oil and mining stocks can not be evaluated by ordinary methods. In point of fact, however, experience teaches that all of the larger mining and oil companies prolong their corporate existence indefinitely through discovery of new deposits and absorption of other companies. A few of the smaller high cost producers, such as Mother Lode Coalition, which never earn any money except near the crest of a boom period when prices for the metal are abnormally high, eventually exhaust all of their ore reserves and pass out of existence.

Many mines produce several metals so that it is difficult to ascertain the unit cost of production. In instances where one metal predominates, as is frequently the case with copper mines, it is customary to compute what is known as a "unit operating cost" for the major metal by treating as by-products the metals that are produced in smaller quantities and crediting their aggregate value against total operating expenses. On this basis, we find that unit operating costs for the leading copper companies range all the way from 2.4c per pound of copper in the instance of Cerro de Pasco (which also produces a considerable amount of silver) to 11.1 cents for Miami. These costs are based upon 1928 production. With the present curtailed volume of output, unit costs will of course be higher; for there are always certain fixed expenses (known as "overhead") that tend to swell unit costs when pro-rated over a diminished number of pounds.

High cost mines are known as "Marginal producers";

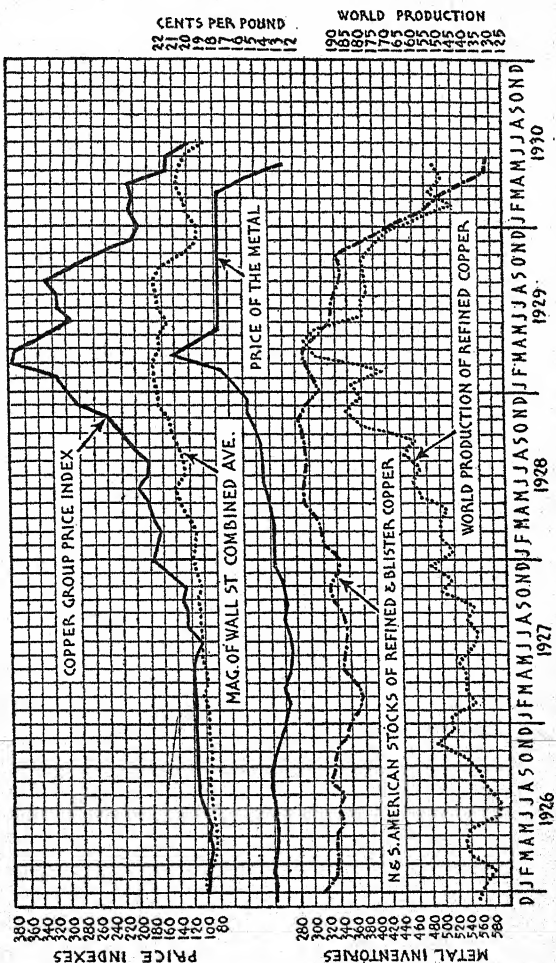
because they make money when prices for the metal are high and operate at a loss when metal prices are low. Miami, for example, would lose money in selling copper below eleven cents, whereas Cerro de Pasco earns a profit at all times. Marginal producers serve to some extent as a governor of prices for the metal. With little surplus upon which to draw in lean years, many of these are forced to curtail output or shut down altogether when prices remain long below cost of production. This helps to reduce surplus inventories of the product and ultimately leads to price stability. As prices rise during the ensuing upswing of the industrial cycle, these high cost producers again find it profitable to resume operations, and the resulting increase in world output tends to check the rise in prices of the commodity.

Earnings of the high cost producers, and hence the market prices of their common stocks, fluctuate over a wider range (measured in percentages) than is the case with low cost producers. For this reason, the latter will be found safer as long pull investments. As short term investments, however, more money can be made by purchasing the high cost producers after the worst phase of depression in the industry is past and the outlook points to better times ahead. People who speculate in the securities of high cost producers should be especially wary of over-staying the market; for these are the first to begin the long decline as the booms draw to a close. This is true not only of mining companies but of all marginal (high cost) companies in any industry.

Forecasting the Trend

It will be noted from the accompanying chart that THE MAGAZINE OF WALL STREET'S Copper group price index tends to follow the trend of prices for the

COPPER GROUP INDICATORS



metal; except for the eleven months' interval between May, 1929, and March, 1930, when copper was held artificially by the Copper Export Association at the uniform price of 18 cents. Owing to this interference with the natural law of supply and demand, traders and investors in the copper stocks will find an inverted curve of refined and blister inventories in North and South America a better guide than metal prices. It will be observed that, so long as metal prices were allowed to follow their natural course, turning points in the price curve occurred about three to five months later than corresponding turning points of the inverted inventories curve. During the period when metal prices were under artificial control, the common stock price index moved according to this same time lag. For this reason, people who operate in copper stocks will find the inverted inventories curve a more reliable guide to the trend than the metal price curve.

As will be seen from the chart, there is little direct relation between common stock price movements

TABLE VII
PER-SHARE EARNINGS RECORD OF LEADING LISTED COPPER STOCKS
(Compensated for Stock Dividends and Split-ups)

Stock	1925	1926	1927	1928	1929	1929 High
Anaconda Copper Mining.....	5.85	4.74	3.37	7.38	11.00-e	140
Anaconda Wire & Cable.....		3.90	2.95	4.80	4.77	89½
Andes Copper Mining.....			0.10	4.80	4.00-e	68¾
Calumet & Arizona Mining.....				9.22	9.18	136¾
Calumet & Hecla Cons. Copper Def.	0.75	0.29	1.55	2.66		61½
Cerro de Pasco Copper.....	5.36	4.05	3.26	5.13	9.00-e	120
Chile Copper	2.72	2.65	2.51	4.52	6.00-e	127½
General Bronze				3.61	4.01	69¾
Granby Cons. Mng., Sm. & Pr.	0.43	1.54	0.22	3.45	6.24	102½
Greene Cananea Copper.....	1.18	1.17	1.16	3.95	9.00-e	200½
Howe Sound	1.91	5.44	4.32	5.34	7.38	82½
Inspiration Cons. Copper	1.54	1.11	0.62	2.93	4.02	66½
Kennecott Copper	2.67	2.90	3.11	5.01	6.10	104½
Magma Copper	2.34	2.96	2.02	4.78	7.35	82½
Miami Copper	1.50	1.52	1.53	2.47	5.11	54½
Nevada Cons. Copper	1.21	1.87	1.18	3.13	3.60	62½
Phelps-Dodge	2.53	2.06	1.14	5.04	4.80	79¾
Revere Copper & Brass.....	0.54	1.62	1.97	4.32	3.31	54¾

e Estimated.

and rates of change in world production of refined copper.

Table VII shows how the earnings of leading copper companies fluctuate with prices obtained for the metal, which averaged as follows during the past five years:

Year	Average Price of Copper (Cents per Lb.)
1925.....	14.04
1926.....	13.80
1927.....	12.92
1928.....	14.57
1929.....	18.11

Per-share earnings in Table VII are, in most instances, before depletion.

The only reliable method of computing intrinsic values of mining companies' stock is to find the present worth of estimated ore reserves, for an assumed average price for the product, a projected rate of extraction, and with money worth, say, 7%. It is a rather complicated calculation, and tells nothing, of course, about the price that speculators may see fit to make for a stock in the near future. Sooner or later, however, market prices always come back to values.

B. Miscellaneous Mining and Smelting

TABLE VIII

PER-SHARE EARNINGS OF LEADING LISTED MINING AND SMELTING
STOCKS (MISCELLANEOUS)
(Compensated for Stock Dividends and Split-ups)

Stock	1925	1926	1927	1928	1929	1929 High
Am. Metal Co.....	5.06	3.88	3.64	3.58	3.23	81¾
Am. Smelting & Refining.....	6.39	7.79	6.55	8.24	10.02	130¾
Am. Zinc, Lead & Smelting.. Def.		Def.	Def.	Def.	0.53	49¾
Butte Copper & Zinc.....	0.63	0.32	0.10	0.31	0.34	9½
Dome Mines	1.69	1.41	1.59	1.57	1.87	11¼
Federal Mining & Smelting.....	51.80	49.00	23.36	24.15	36.00	310
Intl. Nickel Co. of Canada....	0.38	0.50	0.55	1.05	1.47	72¾
McIntyre Porcupine Mines....	1.45	1.25	1.82	1.94	2.00 ^e	23½
Park-Utah Cons. Mines.....	0.92	0.74	0.75	0.44	0.22	13¾
Patino Mines & Enterprises..	3.49	3.10	3.47	3.78	3.31	47¾
St. Joseph Lead.....	4.97	4.21	2.06	2.30	3.82	94
U. S. Smelt., Ref. & Mng.....	3.42	3.81	3.79	3.50	3.36	72¾
Vanadium Corp. of America	4.39	5.50	4.97	4.55	4.91	116½

^e Estimated.

In Table VIII are presented the five-year earnings records of leading listed mining and smelting companies which produce one or more of the metals, zinc, lead, tin, nickel, vanadium, silver, and gold. The common stocks of all these companies are influenced by trends in the Combined Average and by fluctuations in prices of the various metals, much after the manner of copper stocks. It will be noted that smelting companies generally enjoy more stable earnings than companies engaged solely in taking ore out of the ground. This is because profits from smelting can be made more independent of market prices for the metals. Most of the leading smelting companies, however, also operate mines of their own. American Smelting & Refining common stock has always sold on a relatively high yield basis, in all kinds of markets. At current price of 50, it pays \$4.00, and yields 8%, despite assurances from the company's president that the dividend will not be reduced. It is one of those perpetual paradoxes in which the stock market often indulges. Investors should be especially wary of purchasing the securities of unproved and unlisted mining and oil stocks. Billions of dollars have been sunk irretrievably in unproductive prospect holes. Even millionaire bankers have lost money in mining ventures, despite their customary thoroughness in investigating before investing. We would especially warn our readers against listening to the glowing promises of unknown telephone solicitors, who want to let them in on the ground floor. The stock these have to sell will always turn out to be worthless.

C. Coal

Coal mining has for years been one of the great sore spots in world industry. It supplies one of the greatest of business necessities: yet neither capital nor

labor is paid more than a mere pittance for this indispensable service. The industry is shot through with both local and international competition, and consequent inefficiency. There are almost countless coal mines in the world, unorganized, and varying in size from huge deep mines to small surface pits. Few are able to make enough money to install up-to-date equipment; and incessant efforts to cut expenses by reducing wages lead every few years to prolonged strikes and lockouts. It is therefore not surprising to learn from the earnings figures submitted in Table IX that few of even the leading coal companies have been able to show a sufficiently stable record of profits to warrant classing their common stocks as safe long pull investments. The only possible exceptions to this generalization are Island Creek Coal and Truax-Traer. The former especially has proved for many years to be a consistent earner.

As speculations, however, recurrent rumors of mergers and projected power plants at mine mouth, have offered opportunities for quick and handsome profits to those who were fortunate enough to buy and take their profits at the right time. The market gyrations of Pittsburg Coal and Philadelphia & Reading Coal and Iron, for example, have always been particularly satisfying to traders who thrive on excitement. No one really believes that either of these companies is likely to earn much, in the near future at least; but earnings are of little consequence to speculators. A limited floating supply is a matter of far greater moment.



TABLE IX

PER-SHARE EARNINGS RECORD OF LEADING LISTED COAL STOCKS							
Stock	1925	1926	1927	1928	1929	1929	High
Burns Bros. (N. J.) "B".....	7.17	0.88	0.14	1.11	0.46	39	
Elk Horn Coal Corp.....	Def.	0.35	Def.	Def.	Def.	10½	
Island Creek Coal.....	3.22	4.42	5.64	4.46	5.05	69	
Lehigh Valley Coal.....	.....	.....	.....	.....	0.41	32	
Penn. Coal & Coke.....	Def.	Def.	Def.	Def.	0.63	14	
Phila. & Reading Coal & Iron	Def.	0.32	Def.	0.03	.....	34	
Pittsburgh Coal	Def.	Def.	Def.	Def.	Def.	83¾	
Pittsburgh Terminal Coal.....	0.69	1.23	Def.	Def.	Def.	34½	
Truax-Traer Coal .....	.....	.....	2.99	2.31	3.16	31½	
United Electric Coal.....	.....	4.07	4.49	4.66	3.20	81½	

CHAPTER VII

Retail Merchandising

REVOLUTIONARY changes have been taking place of recent years in that most ancient of man's business activities, retail merchandising. All over the land we find stores combining into chains, and going in for real estate and manufacturing. These are three important developments in the retail field which investors will find well worth watching.

The economic justification of chain store retailing is, of course, the saving in expenses, part of which can be passed along to the consumer and still leave a fair margin of profit for the company. The three chief savings are effected through mass buying, concentration in management, and elimination of delivery and bookkeeping expenses and losses on bad accounts by adhering to the cash and carry policy. Economies of this character obviously yield the greatest profits where the only competition is with small independent stores. Of recent years, however, considerable competition has been developing with other chains conducted along similar lines, especially in the larger centers of population, and in such instances the outcome has been a noticeable slowing down in the rate at which profits were originally expanding.

Great as are the savings effected by chain store methods, experience has shown that there is still room for the intelligently managed independent store. This is especially true in the department store field where chain methods have not proved so successful as sponsors of the idea once anticipated. The explanation for

this lies in certain offsetting disadvantages which are inherent in chain store economies. Mass buying is not applicable to style goods and high priced merchandise; concentrated management means detached management, which thinks of customers in terms of numbers and averages instead of as individuals with distinctive personalities and tastes; the cash and carry plan loses a number of profitable credit accounts, and is not adapted to articles which, for one reason or another, the customer prefers to have delivered or to order over the telephone or by mail.

Such manufacturing as is now done by retail stores is confined largely to staple food products and outer wearing apparel. The time is probably far distant when the stores will produce all, or even a major portion, of the goods they sell. Production involves problems quite different from retail marketing, and very few organizations have ever found it possible to do both efficiently. The annals of business failure are filled with producers who undertook to sell direct to consumers over the heads of jobbers and retailers. Here and there are special instances where the middleman has become a sort of fifth wheel that can be dispensed with; but, in the majority of instances, his activities are still economically useful; otherwise he would cease to earn money.

Real Estate Activities

For rather obvious reasons, some of our larger department stores and chain merchandising companies have been drawn into dealing in real estate as well as merchandise; and it sometimes happens that the results of real estate operations actually overshadow the profits or losses arising from merchandising sales. Such associated real estate activities are likely to mislead investors who undertake to gain a clear conception

of affairs through analysis of a company's published reports; for few, if any, of these properly segregates its merchandising from its real estate operations.

Most of the real estate transactions are handled by subsidiaries whose stock is lumped in the balance sheet under the caption, "Investments." Rentals received, together with profits and losses from sales of properties and leases, are scrambled in the income statement under "Other income." Mortgage liabilities are deducted from property account, and only the net amount after depreciation reserves appears on the balance sheet. Rentals and mortgage interest paid are usually lumped in with operating expenses, taxes, and cost of merchandise. Leaseholds are marked up to current value on the balance sheet, and then depreciated annually by an unstated amount included among "Operating expenses" in the income statement. This is even less defensible than the now discredited practice of marking up old plant and equipment to current reproduction cost; especially when it seems likely that a store will occupy present premises for the duration of its lease. The practical effect of marking up leasehold values and then depreciating these annually is, of course, to pad surplus and understate current profits.

Real estate departments established by retail concerns of recent years have not always been successful. There has perhaps been a tendency to lay too much stress upon location and ownership, with consequent neglect of the merchandising end for which the business is primarily conducted. Comparative analyses of financial reports over a period of years disclose the significant fact that growth in profits is very closely proportional to growth in merchandise inventories, and only distantly related, if at all, to increases in real estate holdings. This conclusion is after all quite

natural; for mark-up and rate of turnover are about the same for all stores that handle like classes of goods; so that the only way to build up profits from one year to another is obviously to carry more stock. If the investment of new capital is diverted from merchandise into fixed plant, then the percentage of return on total investment is bound to diminish.

Selecting the Stock

The problem of selecting the best merchandising stock to buy is no different than in other industries. The time to buy merchandising stocks is when conditions favor a rise in the group index, and the best stocks to buy are those which are currently selling most below what they are worth as long term investments. People who are more speculatively inclined, and willing to assume greater risks, should choose stocks in which strong bull pools or manipulators are operating, which calls for ability to read the "Technical position" of individual stocks. It is much safer, however, to base commitments upon a knowledge of intrinsic values. Market prices almost always come eventually to meet values; whereas pool operations are frequently conducted in utter disregard of values, well meaning propaganda to the contrary.

Ordinarily, the safest stocks to buy are those whose per-share earnings show the most favorable record of increasing earnings. The accompanying table (X) should prove useful in this regard. If one happens to purchase such on the eve of a decline on the market, he may hold them in confidence that the investment will eventually show a profit.

It is often not sufficient for an investor to know what and when to buy: he should also be on the look out for when and what *not* to buy, or when and what to get out of. There are three circumstances in partic-

TABLE X
PER-SHARE EARNINGS RECORD OF LEADING LISTED RETAIL
MERCHANDISING STOCKS
 (Compensated for Stock Dividends and Split-ups)

<i>A—Department Stores</i>					
	1926	1927	1928	1929	1929 High
Abraham & Straus.....	7.41	7.96	8.31	4.80	159½
Arnold Constable.....	1.62	3.20	1.93	Def.	40½
Associated Dry Goods.....	4.21	4.31	3.49	3.41	70¾
Best & Co.	2.88	3.17	3.26	4.20	61¾
Bloomington Bros.	3.31	1.82	3.80	1.08	61½
Fair (The)	3.78	3.30	3.70	3.75	51½
Gimbel Bros.	3.03	0.08	Def.	Def.	48½
Hahn Department Stores.....	3.69	3.61	3.24	1.85	56¾
Interstate Dept. Stores.....	2.53	3.72	4.82	3.89	93½
Kaufmann Dept. Stores.....	2.73	2.63	2.12	2.54	37½
Kresge Dept. Stores.....	0.31	0.25	0.91	0.07	23
Macy (R. H.) & Co.....	.....	.....	.....	6.70	.....
Marshall Field & Co.....	4.94	5.64	5.44	5.02	.....
May Dept. Stores.....	6.20	5.43	4.84	4.69	105½
National Dept. Stores.....	1.68	1.06	2.28	2.25	37¾
Oppenheim, Collins & Co.....	7.13	7.59	6.86	7.09	84½
<i>B—Variety Stores</i>					
Atlas Stores .....	.....	.....	.....	.....	49
Grand (F. & W.)—Silver Stores....	2.19	2.95	3.64	4.04	44½
Grand (W. T.) & Co. (Del.).....	2.10	2.30	2.56	2.58	72½
Kresge (S. S.) Co.....	2.24	2.51	2.80	2.68	57½
Kress (S. H.) & Co.....	4.65	5.26	5.76	5.92	114
McCrary Stores	4.80	5.26	4.61	4.28	113¾
Woolworth (F. W.) Co.....	2.89	3.62	3.63	3.66	112
<i>C—Grocery Stores</i>					
American Stores	4.66	4.08	3.32	4.25	85
Dominion Stores, Ltd.....	1.41	1.83	2.02	2.17	54½
First National Stores.....	2.58	2.01	4.13	5.50-e	90
Grand Union	0.77	1.29	1.60	2.04	32½
Jewel Tea Co.	4.45	4.50	5.47	6.04	92¾
Kroger Grocery & Baking.....	3.37	3.62	3.21	3.28	113¼
National Tea Co.....	2.29	3.04	4.27	3.89	91¾
Park & Tilford	2.48	3.45	5.76	4.67	84½
Safeway Stores	4.47	5.53	8.12	9.02	195¾
<i>D—Restaurants</i>					
Childs	3.83	2.22	Def.	2.56	75½
Shattuck (F. G.).....	1.46	1.76	2.09	2.61	71
<i>E—Tobacco Stores</i>					
Schulte Retail Stores.....	4.83	4.90	3.33	0.28	41½
United Cigar Stores.....	3.54	1.33	0.63	0.32	27½
<i>F—Mail Order Houses</i>					
Montgomery Ward	2.09	3.43	4.77	2.60	156½
National Bellas Hess.....	Def.	Def.	3.42	Def.	68¾
Sears, Roebuck	4.82	5.50	5.92	6.49	170½
Spiegel, May, Stern.....	8.64	8.85	7.43	7.22	117½

e Estimated.

ular when merchandising stocks should be avoided: when competition is severe; and when the company is embarking upon an extensive program of expansion, or rehabilitation.

Of recent years, competition has been severest among the tobacco retailers. The two leading chains—Schulte and United, in particular—have had to bear the brunt of competition from large retail food chain stores, which have been slashing prices on advertised brands of cigarettes. The food stores believe that any loss on cigarettes is more than made up by increased sales of staple food products; whereas cigarettes are the major line with the tobacco stores. Competition among department stores and restaurants is also quite severe; so that there are proportionately fewer high grade investments among these groups than among grocery and variety store companies.

The stock market response to expansion programs is similar in all industries, and quite characteristic. If a bull market is in progress at the time when a company decides to embark upon an ambitious program of expansion, manipulators are likely to seize upon this development as justification for engineering a sharp rise in the company's stock. The movement is usually accompanied by enthusiastic estimates of enlarged profits to be realized when the expansion is completed. Usually this carries the price to a point that more than discounts any earnings that may be reached in the next few years, and so the manipulators avail themselves of the opportunity to sell out at a handsome profit. After this the stock is likely to sag for months or even years, as successive earnings reports fail to substantiate earlier estimates. The decline in market price may even assume large proportions in instances where capital for expansion purposes is raised by the flotation of additional stock. This is partly due to the en-

larged floating supply, and partly to the fact that current earnings at the old rate will fall off on the new per-share basis until properties in which the additional capital is being invested earn their quota of total profits. If the expansion has been wisely planned the stock will eventually recover its loss, and perhaps rise to new heights; but it is well for investors to await tangible indications of the outcome before loading up too heavily with the stock. Expansion that is financed out of earnings, on the other hand, may or may not exert a temporarily depressing influence upon the stock's market progress, depending upon how much of the capital outlay is charged to operating expenses.

Rehabilitation of any character—whether it be alterations of plant, change in management or location, changes in nature of product, or merger with other companies—almost always causes a drop in profits, and consequent decline in the stock's market price, that may last for months or years. If such rehabilitation is to result eventually in larger per-share earnings, patient investors may reap handsome profits by purchasing the stock during this period of temporarily poor earnings.

Market Indicators

A. Department Stores

Department store stocks, as a group, do not follow movements in the general market very closely. About the best barometer for this group is a curve of debits to individual account (check payments) expressed in percentages of the corresponding debits a year earlier. The figures are published weekly in the Sunday papers. Check payments for New York City should be used in forecasting THE MAGAZINE OF WALL STREET's department store group price index, since it is composed

largely of stores located in this city. Comparison of the two curves will show that turning points in the department store price index tend to come rather irregularly a few months later than corresponding turning points in the check payment curve. Rather curiously, the Federal Reserve Board's monthly index of department store sales for the New York district is of no value whatever as a barometer of coming market movements in the department store group. The fact that *check payments are useful* as a barometer, seems to confirm the general belief among merchants that business is good when the stock market is rising and active, and poor when it is dull and down; for a large portion of check payments in New York are in settlement of transactions on the exchanges here.

B. *Variety Stores*

Price movements in the variety store group tend to conform rather closely in direction with those in the general market for all common stocks, as expressed by THE MAGAZINE OF WALL STREET'S Combined Average.

C. *Grocery Stores*

Stocks in this group also tend to follow the Combined Average; so that barometers used to forecast the general market also enable one usually to predict the trend of food stocks as a group.

D. *Restaurants*

Also tend to follow the Combined Average in direction.

E. *Tobacco Stores*

An unfortunate combination of competition and

mismanagement has brought the market prices of the two leading stocks in this group down to such low figures that their movements are now too erratic to be forecasted by any barometer. Short term commitments in stocks of this group must be regarded for the present as highly risky. The long term investment possibilities must be judged by news developments and future financial reports. The new management in United Cigar Stores is to be congratulated upon abolishing the former misleading accounting practices and, it is hoped, will manage the company more in the interests of stockholders.

F. Mail Order Houses

It is generally conceded that the volume of mail order business is largely dependent upon prosperity of the farmer. The difficulty in putting this observation to practical use for forecasting purposes is to find a suitable index of agricultural prosperity. There are days when sharp, temporary movements in the mail order stocks are attributed by column writers to events in the wheat market; but there is no statistical evidence that wheat prices bear any barometric relation to the broader group movements in mail order stocks. Like most of the other subdivisions of the retail merchandising business, we find that mail order stocks, as a group, tend to turn with the general market. Mail order stocks usually rise simultaneously with the Combined Average; but tend to turn downward about a month later than the general market, especially after an extensive upward movement.

Most of the leading mail order houses report their gross sales monthly, and this is frequently a great help to the investor in deciding which stock of the group to buy.



CHAPTER VIII

Food Manufacturing

UNDER the classification of Food Manufacturing will be included for convenience of treatment a number of companies which operate under widely different economic influences; but which have this much in common that they produce goods, speaking colloquially, "to feed the mouth." Among these are bakers of bread, cake, and biscuit; packers and canners of meat, fruit, and vegetables; producers of hard and soft drinks, and of oil, lard, yeast, baking powder, and syrups; growers and refiners of sugar; manufacturers of confectionary, chewing gum, and tobacco; fisheries; flour mills; producers of milk, cream, and cheese; and the growers and shippers of fruit. Only the farmer is unrepresented; because he has not as yet advanced to the point of incorporating his business and listing his shares.

The investment value of any common stock is determined by the course of per-share earnings over a period of years. Competition and fluctuations in inventory values are important considerations in shaping the course of earnings in any industry; but should receive special attention when analyzing the food companies, which often operate on a narrow margin of profit.

Complete absence of competition is tantamount to monopoly, a situation that is most favorable to profits. Among the food companies there are practically none which enjoy a complete monopoly, though many have quasi-monopolies. In this field, quasi-monopolies are largely the outgrowth of mere size, superior manage-

ment, strong banking connections and, above all, well advertised trade marks. Companies which are able to control their supply of raw material usually enjoy a much more stable earning power than those whose supply is dependent upon the whims of nature.

Market Indicators

So far as the writer has been able to discover there are no satisfactory economic barometers from which to forecast the market trend of any of the sub-groups of the food manufacturing industry. Movements in the syrup group seem to conform closely to the Combined Average. Baking, Biscuit, Meat Packing, and Miscellaneous Food Manufacturing stocks move in just fair agreement with the Combined Average. Conditions in the Sugar industry have been so demoralized during the past few years that the group declines with the general market; but frequently fails to participate in its upward movements. Soft Drink stocks show the opposite tendency: rising with the general market; but frequently refusing to sell off when the latter declines. Tobacco stocks displayed the same characteristics as the Soft Drink group from the beginning of 1926 up to about the middle of 1928; but since then have behaved much like the Sugar group. This change in behavior is accounted for by the appearance of competition in the Tobacco industry about the middle of 1928. Stocks in the Dairy Products group, during the past few years, have frequently moved in directions contrary to the general market; so that news, rumor, and technical position readings are about the only means of forecasting their trend. This is probably due to the fact that the Dairy Products group embraces several companies whose earnings are extremely erratic.

Long pull investment possibilities differ widely

among the various sub-groups of the food industry, as will appear from an inspection of Table "A".

TABLE A
THE MAGAZINE OF WALL STREET'S FOOD GROUP PRICE INDEXES

Sub-group	Closed End of 1925	Closed End of June, 1930
Sugar	100	20
Syrups	100	220
Soft Drinks	100-x	217
Tobacco	100	81
Dairy Products	100	103
Meat Packing	100	44
Baking	100	45
Biscuit	100	213
Miscellaneous Food Manufacture.....	100	74
Food Chain Stores.....	100	88

x 1926 Close.

The $4\frac{1}{2}$ years' advance of only 3% in the Dairy Products price index is probably not a fair indication of the long pull investment opportunities in leading stocks of this group—partly because the group includes several of the smaller companies which have been rather "unlucky" in their operations, and partly because earnings of the larger companies are still held in check by elaborate expansion programs. Owing to a world wide overproduction of sugar the market record of stocks in this group offers strikingly unfavorable comparison with issues in the syrups group, which have been profiting handsomely from the purchase of raw material at low prices. Contrast between the investment records of stocks in the Baking and Biscuit groups is equally startling. It is the outcome of destructive competition and self-seeking management on the one hand, as compared with exceptionally capable management and well established trade marks among the leading biscuit companies. The Soft Drink group has advanced 117% in $4\frac{1}{2}$ years, and seems destined for still higher levels a few years hence. Leading companies in this group are in a large measure

shielded from destructive competition by well advertised trade marks and through the possession of secret formulas. Meat packers operate on a very slender margin of profit, under highly competitive conditions, and are quite powerless to regulate fluctuations in the value of inventories.

In view of the foregoing thumbnail analyses it is quite to be expected that the majority of attractive long pull investment opportunities will be found among the groups whose price indexes have made favorable progress during the past few years; though there are some sound investments in the other sub-groups.

TABLE XI
PER-SHARE EARNINGS RECORD OF LEADING LISTED FOOD
MANUFACTURING STOCKS
(Compensated for Stock Dividends and Split-ups)

A. Candy, Soft Drinks, and Chewing Gum						
Stock	1926	1927	1928	1929	1929 High	
American Chicle	2.50	2.95	3.61	4.22	81½	
Canada Dry Ginger Ale.....	3.80	5.07	6.10	5.55	98¾	
Coca-Cola	5.25	6.16	7.19	10.25	154½	
Hershey Chocolate	3.67	3.00	6.05	7.65	143¾	
Sweets Co. of America.....	0.43	0.47	1.06	1.22	30	
White Rock Mineral Springs.....	3.26	3.69	4.04	4.36	22¾	
Wrigley (Wm.), Jr.....	4.81	5.16	5.85	5.80	80¾	
B. Baking Products						
Continental Baking "A".....	8.05	5.09	4.15	8.12	90	
General Mills	6.08	6.41	7.16	6.50-e	89½	
Loose-Wiles Biscuit	2.75	3.25	4.07	4.88	87¾	
National Biscuit	2.53	2.84	2.92	3.28	94¾	
Pillsbury Flour Mills	4.90	4.51	5.12	4.50-e	63¾	
Purity Bakeries	3.61	4.80	5.86	7.17	148¾	
United Biscuit Co. of Amer.....	2.68	2.72	3.02	4.39	60	
Ward Baking "B"	2.71	2.32	0.72	0.47	21¾	
C. Dairy Products						
Beatrice Creamery	5.97	6.66	6.31	7.43	131	
Borden Co. (The).....	5.27	5.01	4.40	5.34	97¾	
National Dairy Products.....	3.16	3.18	3.75	3.96	83¾	
Southern Dairies "B"	0.53	Def.	Def.	Def.	15¾	
Western Dairy Products "B".....	2.78	0.82	0.93	1.81	40	
D. Meat Packing						
Armour & Co. (Ill.) "A".....	0.62	Def.	1.12	0.41	18½	
Cudahy Packing	8.17	4.17	4.68	4.13	67¾	
Gobel (Adolf) .....	.....	.....	1.61	0.30	66	
Morrell (John) & Co.....	4.76	3.97	9.06	8.58	81¾	
Wilson & Co. "A"	5.13	Def.	0.58	0.85	27	

e Estimated.

TABLE XI—*Continued*
PER-SHARE EARNINGS RECORD OF LEADING LISTED FOOD
MANUFACTURING STOCKS
(Compensated for Stock Dividends and Split-ups)

		E. <i>Sugar</i>				
Stock		1926	1927	1928	1929	1929 High
American Beet Sugar.....	Def.	0.76	0.59	Def.	20½	
American Sugar Refining.....	7.08	0.97	7.60	8.39	94¾	
Central Aguirre Assoc.....	1.47	3.46	3.83	0.42	48¾	
Cuban-American Sugar	0.39	1.08	Def.	0.65	17	
Cuban-Dominican Sugar	Def.	Def.	Def.	Def.	6¾	
Great Western Sugar	1.29	1.38	3.74	2.64	34	
Guantanamo Sugar	0.34	1.01	Def.	Def.	5½	
Manati Sugar	Def.	0.17	Def.	0.14	26	
Punta Alegre Sugar.....	Def.	0.53	Def.	0.04	21½	
South Porto Rico Sugar.....	2.40	3.65	5.20	2.52	45	

		F. <i>Tobacco</i>				
American Snuff	3.26	3.95	4.41	4.25	51½	
Amer. Sumatra Tobacco.....	.....	4.35	2.93	3.31	60	
Amer. Tobacco "B".....	9.90	10.29	11.19	11.53	235	
Bayuk Cigars	9.50	13.60	9.07	10.30	113¾	
Congress Cigar Co.....	6.12	7.87	8.53	8.23	92¾	
Consolidated Cigar	8.34	10.07	10.60	9.46	96¾	
General Cigar Co.....	5.67	7.13	6.85	8.07	74	
Helme (Geo. W.) Co.....	8.10	8.24	8.42	8.52	118½	
Liggett & Myers "B".....	6.14	6.57	6.82	7.82	106	
Lorillard (P.) Co.....	2.58	1.25	0.75	0.29	31½	
Morris (Philip) & Co., Ltd.....	0.99	1.06	1.15	1.03	23¾	
Porto Rican-American Tob. "B".....	.....	Def.	Def.	4.68	50¾	
Reynolds Tobacco "B".....	2.62	2.91	3.02	3.32	66	
Standard Commercial Tobacco.....	1.90	2.49	Def.	Def.	43¾	
U. S. Tobacco.....	4.38	4.78	4.97	5.21	91½	
Universal Leaf Tobacco.....	3.67	5.27	5.57	7.00-c	63¾	
Webster-Eisenlohr	1.44	0.83	0.37	0.08	113¾	

		G. <i>Miscellaneous</i>				
Beech-Nut Packing	4.90	4.95	6.11	6.03	96½	
Booth Fisheries	0.02	Def.	Def.	Def.	11¾	
California Packing	5.17	3.52	6.38	6.16	84¾	
Corn Products Refining.....	3.88	3.50	4.35	5.49	126¾	
General Food	4.04	3.97	3.75	3.89	77¾	
Gold Dust .....	.....	.....	3.16	4.06	82	
Natl. Distillers Products.....	Def.	Def.	Def.	1.42	58	
Penick & Ford, Ltd.....	1.37	2.04	2.56	3.97	60¾	
Snider Packing	12.55	Def.	Def.	Def.	16¾	
Standard Brands	1.67	1.71	1.69	1.37	44¾	
United Fruit	7.43	7.48	7.85	6.78	158½	
Wesson Oil & Snowdrift.....	3.92	2.81	3.53	2.07	55½	

c Estimated.



CHAPTER IX

Oil

THE investor who undertakes to analyze the oil industry will find here almost as many widely divergent lines of activity as there are industries in the business world. The field includes companies engaged in land speculation; prospecting; drilling; oil well supplies; reclamation of dry wells; production of crude; storage; financing; transportation by trucks, pipelines, tankcars, barges and tankers; all degrees of refining from topping to cracking and hydrogenation; natural gas production, piping and marketing; asphalt, wax, coke, carbon black, coal tar and innumerable chemical by-products—even helium; exporting and importing; jobbing, wholesale marketing and retailing. Most of the large companies are well integrated or complete units, which engage in the great majority of the foregoing activities—from prospecting, or “Wild-cattin’,” as it is called, to retail distributing. The stocks of such well integrated companies are less speculative and, in some instances, may be regarded as safe outright investments for the long pull; because the hazards attendant upon specialized activities tend to offset one another when brought into the fold of one large corporation. It is the old principle of diversification of risk. On the other hand, there are periods of swift change in industrial outlook, when stocks of even the larger companies offer speculative opportunities. Under no circumstances, however, should a person put money into any oil promotion, no matter how glowing

the prospectus or how eloquent the salesman, unless he can well afford to lose it all.

Owing to the widely divergent character of activities among individual companies in the oil industry, it frequently happens that conditions which affect some groups adversely will bring prosperity to others. Excessive production, which is bad for refiners and the producers of high cost crude, may benefit companies engaged in the transportation of oil products by tank car or pipelines, the dealers in oil well supplies, and companies which bring in the gushers. A drop in crude prices would be bad for producers, though welcomed by companies which purchase crude for refining. The earnings of companies which carry large quantities of crude and refined products in storage fluctuate more severely with changes in the price level than those of companies with low inventories. The character of oil produced, and its accessibility to markets, are also of importance when estimating a company's investment possibilities.

The earnings of companies which produce advertised branded products—such as vaseline, special lubricants, and medicinal oils—fluctuate inversely with the cost of crude; for the market prices of their finished products are practically as stable as the prices of trademarked brands in other industries. Differentials in transportation rates often exert a marked influence upon the volume of sales, and thus upon the earnings, of individual companies—especially in the instance of pipeline companies. So long, for instance, as the cost of California oil laid down in New York is less than the price of similar-Mid-continent crude plus pipeline rates, the eastern pipelines may not operate at capacity. Competition with imported oils, especially Venezuelan heavy crude, is also a factor to be considered.

Natural Gas

Natural gas companies fall more under the class of public utilities and are little affected by fluctuating conditions in the petroleum industry. The discovery of new sources of natural gas and the opening of new markets frequently create attractive short term investment opportunities in the stocks of such companies. Natural gas is now piped for distances of several hundred miles, and one of even 900 miles, from the Panhandle to Chicago, is being seriously proposed.

Standard Oil of New Jersey holds the largest natural gas interests of any one company, and it is unofficially estimated that about half of its earnings are derived from this source. Other companies prominent in this branch of the industry are Columbia Gas and Electric, Houston Oil, Standard Oil of California, Pacific Gas & Electric, Cities Service Co., the Texas Corp., Phillips Petroleum, Skelly Oil, and Prairie Oil & Gas.

The Petroleum Industrial Cycle

There is no more beautiful example of the cycle theory of prosperity than that afforded by the petroleum industry. As prices rise, new wells are drilled and existing shut-in wells are opened, production rises, stocks grow to unwieldy proportions, prices fall, marginal operators find it unprofitable to sell at current prices, production decreases, stored oil is drawn upon and stocks recede: finally prices begin to advance again, thus completing the old cycle and beginning the new.

Voluntary control of production through cooperation of leading companies is at present writing meeting with considerable success; but jubilation over the permanence of this new spirit of harmony in the industry should perhaps be tempered by the thought that distress

often brings a unity that prosperity disrupts. Conditions were bad enough a year ago to bring about their own correction through the natural operation of economic laws. It remains to be seen whether cooperative control of production can withstand the disruptive stress of high prices. In the meanwhile the investor in oil stocks will find it profitable to accept the cycle theory as a basis for his forecasts; but always with a weather eye open for any one of a thousand possible developments that may alter the outlook for the industry as a whole, or any of its many subdivisions—including every item of information that may affect the prices of individual oil stocks.

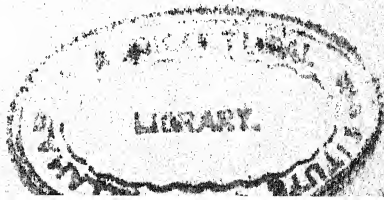
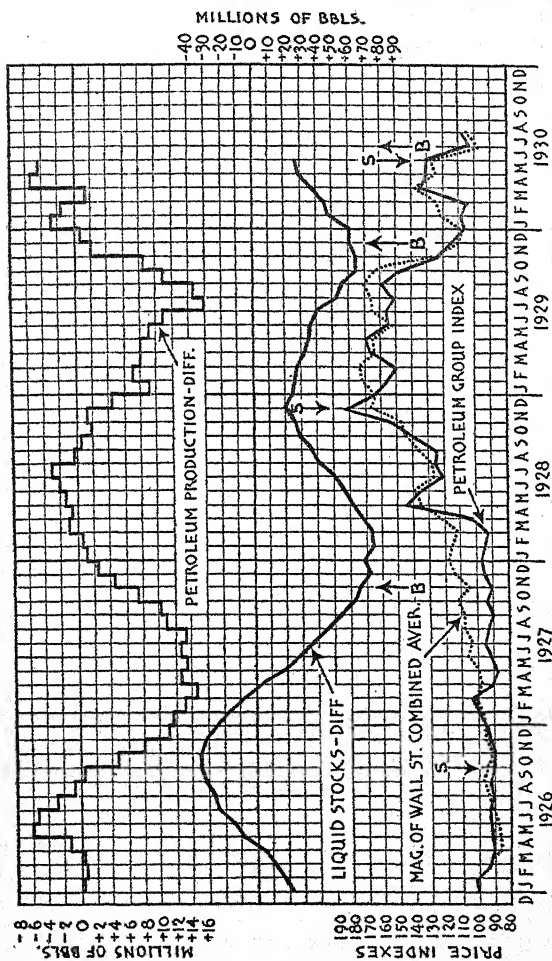
Market Indicators

Despite the great variety of characteristics among oil companies there is a marked tendency for all stocks in this broad group to move simultaneously in the same direction, individual differences being reflected only in the relative magnitudes of their price swings.

For purposes of forecasting important swings in the petroleum group price index we have an excellent set of "progressive" economic barometers. These are three: number of wells brought in; crude production; and liquid stocks of crude, gasoline, gas and fuel oils, kerosene, and lubricating oil—including California. All three curves should be drawn to an inverted scale, and expressed in units above or below the previous year. Such barometers are known as "Difference curves."

Examination of the accompanying chart will disclose that the petroleum group price index usually turns downward a few months after the inverted liquid stocks difference curve; that the liquid stocks curve turns downward a few months after the inverted production difference curve; and that the production curve turns

PETROLEUM Group INDICATORS



downward, more often than not, a few months later than the inverted wells-brought-in difference curve (which lack of space prevents including on the chart). And then, to close the forecasting circle, we find that the wells difference curve turns downward about a year later than the liquid stocks curve. The same sequence of turning points in the three economic curves is to be observed on the upswing. Thus we have a complete set of economic curves which would forecast developments in the industry, and group movements in the stock market, years in advance, were it not for the lack of irregularity as to the exact number of months by which one curve follows the other.

No economic barometer, so far as we know, can forecast industry and the stock market exactly; for the precise date of turning points depends partly upon technical conditions and public psychology. But economic barometers, reinforced by studies of the technical position, and supplemented by due attention to the prevailing frame of mind in business and the stock market, are of very great forecasting value.

There is no direct relation between the magnitudes of movements in the economic barometers and in the stock market. The chart shows, for example, that a large drop in liquid stocks during 1926 was followed by a small advance in the petroleum group price index, whereas a smaller decrease in liquid stocks in 1928 was followed by a tremendous advance in the petroleum group index. On the other hand, a very large increase in liquid stocks during 1927 was followed by an insignificant recession in the petroleum group price index, whereas the relatively small increase in liquid stocks during 1929 was followed by a big break in the petroleum group price index.

Owing to the irregularities just mentioned, it is with some hesitation that the writer suggests the following

definite rules for buying and selling oil stocks, as a group.

1. Oil stocks may be bought profitably for a pull of a few months to a year about two months after the inverted production difference curve has risen at least three million barrels above its low point (this means after monthly production has fallen at least three million barrels below its highest excess above the previous year).

2. Oil stocks held for short term investment should be closed out (but not necessarily sold short) about two months after the inverted production difference curve has fallen at least three million barrels below the peak.

The buying and selling points determined by these two rules are indicated respectively on the chart by the arrows designated "B" and "S". It will be noted that the weakness in petroleum common stocks during 1927 was merely relative to the Combined Average, not actual. In 1929, there was actual weakness. Hence in applying these rules first consideration should be given to the trend of the general market.

Investment Values

There is such a lack of uniformity in accounting practice among the oil companies, and their span of life is in many instances so uncertain, that stocks in this group can not be valued satisfactorily by the Durand method. About the best one can do is to buy the most promising oil stock at a time when conditions favor an advance in the group and in the general market; then close out the investment when conditions point to a coming decline in the general market or the group. Never try to "buck" the market trend, you may succeed, but the odds will be enormously against you.

TABLE XII

PER-SHARE EARNINGS RECORD OF LEADING LISTED OIL STOCKS
(Compensated for Stock Dividends and Split-ups)

Stock	1926	1927	1928	1929	1929 High
Amerada	6.05	4.02	2.40	2.99	42½
American Republics	11.00	Def.	Def.	Def.	64¾
Atlantic Refining	2.81	0.46	7.72	6.79	77½
Barnsdall "A"	5.18	3.64	2.25	3.25	49½
Continental Oil (Del.)	3.43	Def.	Def.	1.90	37¾
Houston Oil of Texas	6.63	7.58	5.11	4.78	109
Independent Oil & Gas	5.95	3.56	3.81	4.32	39¾
Indian Refining	1.09	0.01	0.66	0.66	53
Lago Oil & Transport	0.98	1.99	0.52	0.71	38¾
Mid-Continent Petroleum	4.63	1.78	2.50	4.19	39½
Pan Am. Pet. & Trans. "B"	9.32	5.03	3.00	.....	69¼
Phillips Petroleum	8.47	1.96	2.36	4.94	44¾
Prairie Oil & Gas	6.58	0.97	4.34	5.90	65¾
Prairie Pipe Line	3.57	4.53	4.89	5.63	65
Producers & Refiners	1.48	Def.	0.98	Def.	25½
Richfield Oil	2.33	2.92	4.65	4.08	49¾
Rio Grande Oil of Del.	0.20	0.18	1.33	4.58	42½
Royal Dutch	3.27	3.27	3.32	.....	64
Shell Union Oil	3.05	1.10	2.04	1.26	31¾
Simms Petroleum	2.01	Def.	0.41	2.20	40½
Sinclair Consolidated Oil	3.60	0.89	2.21	2.82	31¾
Skelly Oil	5.20	1.32	3.77	5.28	46½
Standard Oil Calif.	4.29	3.13	3.59	3.70	80¾
Standard Oil, Kansas	0.51	Def.	0.91	4.73	33¾
Standard Oil, N. J.	5.01	1.52	4.43	4.75	83
Standard Oil, N. Y.	1.95	0.67	2.28	2.23	48½
Sun Oil	2.41	1.88	3.33	5.60	79¼
Texas Corp. (The)	4.99	2.77	5.56	5.12	71½
Tide Water-Assoc. Oil	1.35	0.21	2.01	1.73	23½
Transcontinental Oil	0.06	Def.	0.22	1.46	30½
Union Oil of Calif.	3.03	2.57	2.84	3.50	55¾
Warner-Quinlan	3.58	3.00	2.69	2.16	42¾

CHAPTER X

Construction and Equipment Stocks

OUR modern court jester, Will Rogers, recently remarked: "Why don't somebody print the truth about our present economic situation? We spent six years of wild buying on credit (everything under the sun, whether we needed it or not) and now we are having to pay for 'em under Mr. Hoover, and we are howling like a pet coon. This would be a great world to dance in if we didn't have to pay the fiddler."

Economists who are baffled in seeking the cause of our periodic depressions in industry may well ponder this explanation of the so-called "Buyers' strike." Few of us quit spending while we hold a paying job, until our purchasing power is mortgaged about a year ahead. Then we pause to catch up, and the automobile trade and other luxuries and semi-luxuries languish until we pay off a few debts. Installment selling increases this year's consumer purchases at the expense of next year's purchasing power. This, the chief objection to any rapid expansion in consumer credit, was pointed out several years ago in a review of the automobile industry that appeared in the *Manual of THE MAGAZINE OF WALL STREET*.

Ordinarily, however, a slowing down in expenditures for new plant and equipment becomes evident several months in advance of the slackening in consumer purchases. Therein is to be found the usual precipitating cause of our periodic business depressions. At the crest of a boom manufacturers are rushing to enlarge the over-taxed capacity of plants. Upon completion of this

new construction work, the working force that had been utilized for this purpose is laid off, and so the country finds itself with more productive capacity but a slackening demand for goods on account of the idleness of men who were formerly engaged in the expansion program. This is because more men are kept busy in building and equipping a plant than are subsequently employed to keep the new plant operating at capacity. If we could only learn to provide new facilities at a more leisurely and more uniform rate, and if consumers would not all rush into debt at the same time, our prosperity curve would probably make the grade with fewer bumps.

In the present chapter we shall review briefly some of the salient features of stocks in the Construction, Building Material, Machinery, Electrical Equipment, Railroad Equipment, Business Equipment, and Agricultural Implement industries. All of these products fall under the economic classification of "Capital goods," which are utilized for the purpose of producing other goods, as distinguished from "Consumption goods," which are ultimately purchased by individuals for personal use. It was pointed out so far back as 1914 that the rate at which capital goods are being produced is closely related to the total profits earned by a country's industries, and that the first step in smoothing out the business activity curve is to speed up new construction work whenever industrial activity begins to display signs of slowing down. The latter program was put into practical operation last fall by the President's Conference Committee; but economists have not yet accorded to the former portion of our theory the recognition that its importance demands.

Amidst the present conflict of praise and criticism of the President's program for restoring prosperity it may be opportune to point out that the resulting increase in

expenditures for heavy construction work has undoubtedly served to mitigate the severity of the present business depression as compared with former crises of similar character; but it should have been launched about six months earlier at a time when THE MAGAZINE OF WALL STREET's Business Indexes began to point downward. New construction work must then be reduced somewhat whenever business activity begins to increase too rapidly. It will require constant adjustment of construction projects to the rate of current industrial activity if we are to obtain effective control of the prosperity curve. It is only a half measure to speed up new construction *after* a panic has hit us. In industry, as in medicine, an ounce of prevention is worth a pound of cure.

Group Forecasting

Among the stock market's many inconsistencies one of the most conspicuous is its failure to give much heed to even wide fluctuations in the construction and equipment industries. The latter occupy a dominant position among the factors that influence general business activity and yet the stocks of sub-groups in this field have no reliable economic barometers by which to forecast the direction of their market movements. It is possible to forecast profits in the building and equipment industries with fair dependability; but, rather curiously, we find that market trends of THE MAGAZINE OF WALL STREET's *price indexes* for these groups tend to follow the course of the Combined Average quite closely, and often fail to reflect changes in the outlook for profits. This is notably the case among railroad equipment stocks, a peculiarity that will be further commented upon when we come to review that special sub-group.

About the best guide, then, for the investor in construction and equipment stocks is to know that their trend usually follows that of the general market, with a tendency for turning points to occur a month or two later than those of the Combined Average—especially on the down side.

A. Construction and Building Material

This group is composed of quite a heterogeneous variety of companies engaged in the design and construction of roads, factories, business buildings, residences, schools, churches, etc.; and in the production and sale of construction material and supplies such as cement, tile, heating, and plumbing apparatus, wall board and roofing, fire brick, lumber, elevators, paints, steam fittings, hardware, window glass, and auditorium seats.

The building industry has enjoyed a high degree of prosperity during the past five years which has been distributed with more than an average degree of uniformity among leading companies engaged in this line of activity. In some branches of the industry, however, there has been considerable competition from which the stronger companies have profited at the expense of less favorably situated competitors. Some of the companies for which statistics are presented in Table XIII have been able to maintain fairly consistent earnings during the past five years, and a few of the strongest companies have even succeeded in building up increasing earnings during the four year period covered by our Table. Some stocks in both these classes may be regarded as long pull outright investments to hold until the crest of the next business boom, provided the price paid is enough below intrinsic value to make them attractive.

TABLE XIII
PER-SHARE EARNINGS RECORD OF LEADING LISTED CONSTRUCTION AND
BUILDING MATERIAL STOCKS
 (Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Alpha Portland Cement.....	4.20	4.04	3.74	3.44	2.36	54%
Am. Encaustic Tiling.....	2.95	4.12	3.00	3.83	3.06	49
Am. Rad. & Stand. Sanitary	2.26	2.19	2.12	2.27	2.02	55½
Am. Seating Co., vtc.....	5.51	6.14	4.08	2.99	2.38	41½
Celotex	Def.	5.07	3.31	6.57	6.14	79¾
Certain-teed Products	5.20	6.02	6.07	Def.	Def.	32
Devoe & Raynolds "A".....	3.70	5.22	5.48	5.95	4.52	64%
Foundation	10.09	10.06	4.83	3.10	1.95	69½
General Asphalt	4.49	5.53	4.66	2.84	4.71	94¾
Holland Furnace	3.29	3.45	2.77	2.81	4.85	51
International Cement	7.04	6.52	6.90	7.90	7.88	102¾
Johns-Manville	4.02	6.47	4.78	6.75	8.09	242¾
Lehigh Portland Cement.....	10.38	8.14	5.65	5.76	2.79	65
Libbey-Owens Glass .....	.....	.....	1.55	1.65	1.87	55½
Long-Bell Lumber "A".....	4.23	4.00	Def.	0.39	0.06	32½
Mnpls.-Honeywell Regulator	.....	.....	.....	5.76	7.99	123¾
National Radiator	7.12	7.07	Def.	Def.	Def.	17
Otis Elevator	2.22	2.36	2.65	3.50	3.99	112½
Penn.-Dixie Cement .....	.....	.....	2.64	0.90	Def.	27
Standard Plate Glass.....	Def.	Def.	Def.	Def.	Def.	6%
Thompson-Starrett .....	.....	2.31	1.32	0.96	.....	28
Universal Pipe & Radiator..	Def.	2.58	2.07	0.27	Def.	22¾
Walworth	2.08	1.61	0.99	1.09	6.10	49¾
Warren Bros.	1.86	2.88	3.85	4.27	6.06	69¾
Yale & Towne Mfg.....	6.43	6.32	4.85	4.89	5.31	88

B. Machinery

Machinery manufacturing concerns are in many instances more or less shielded from devastating competition, because much of their product is protected by patents or well established trade marks. For this reason there are quite a few of the stocks in this group which have been able to show increasing per-share earnings during the past four years, and which, generally speaking may be expected to continue this trend in years when general business is at all favorable. In selection of stocks in this group it is particularly important to follow the curve of business activity. Machinery plays so large a part in our industry of today that any gain in general activity is immediately reflected in orders for replacement or expansion of production facilities. Foreign conditions, tariffs and competition from abroad should be closely observed in the com-

panies who depend on their export trade for any appreciable portion of their annual sales volume

TABLE XIV
PER-SHARE EARNINGS OF LEADING LISTED MACHINERY STOCKS
(Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Allis-Chalmers Mfg.	2.18	2.35	2.50	2.82	3.78	82½
Am. Machine & Foundry.....	1.81	3.81	7.11	6.56	12.10	279¾
Bucyrus-Erie	3.85	4.04	2.94	2.43	3.70	42¾
Chicago Pneumatic Tool.....	0.31	3.03	2.93	3.27	4.63	47½
Evans Auto Loading.....	2.22	2.41	3.08	3.77	3.34	73¾
Fairbanks, Morse	6.74	6.03	3.09	4.52	5.05	54¾
Foster-Wheeler	2.40	3.54	1.41	3.03	6.35	95
Ingersoll-Rand	6.00	7.73	6.40	7.87	10.54	223½
Internatl. Combustion Eng....	1.55	2.67	2.20	2.75	.....	103½
Link Belt	3.54	4.17	3.10	4.21	4.54	61
National Acme	1.15	0.38	0.39	2.41	4.17	41¾
National Supply (Del.).....	5.71	15.19	8.59	9.59	11.48	144
Oil Well Supply.....	3.69	4.80	0.07	Def.	Def.	32
Transue & Williams Stl. Forg.	1.49	Def.	0.14	2.26	3.26	53¾
U. S. Hoffman Mach.....	5.72	6.04	5.38	4.29	2.62	49¾
Worthington Pump & Mach....	Def.	Def.	Def.	Def.	11.96	137¾

C. Electrical Equipment

In this group are to be found a full range of stocks from the most gilt edged investments, like General Electric, to the rankest speculation, such as Manhattan Electrical Supply, the market manipulation of which has recently been enjoined by the courts.

Since public utility companies are the most important purchasers of electrical equipment, it is not surprising to find that turning points in stocks of the latter group coincide with, or follow a month or two later than, turning points in THE MAGAZINE OF WALL STREET'S Public Utility group price index. This affords to the shorter pull investor a clue as to when is the best time to buy or sell such stocks.

TABLE XV
PER-SHARE EARNINGS OF LEADING LISTED ELECTRICAL EQUIPMENT STOCKS
(Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Am. Brown Boveri Elec. (Part.)	3.95	0.05	Def.	1.04	0.32	34¾
Cutler-Hammer	4.68	5.73	4.33	4.37	8.14	101½
Electric Storage Battery.....	8.58	6.66	6.46	7.10	8.77	104½
General Cable	4.86	3.42	2.75	2.90	4.20	61
General Electric	1.28	1.54	1.60	1.78	2.24	100¾
Manhattan Electric Supply.....	6.01	3.45	4.94	Def.	1.76	37¾
Westinghouse E. & M.....	5.96	6.81	6.60	8.78	10.15	292¾
Weston Electrical Instrument....	2.18	2.40	1.77	2.55	4.49	64¾

D. Railroad Equipment

If we compare earnings of railroad equipment companies for the two peak years, 1926 and 1929, it will be observed from the data submitted in Table XVI that very few of these concerns have been able to show growing earnings.

TABLE XVI
PER-SHARE EARNINGS OF LEADING LISTED RAILROAD EQUIPMENT STOCKS
(Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	High
Am. Brake Shoe & Foundry.....	3.26	3.62	3.22	3.57	3.71	62
Am. Car & Foundry.....	6.67	4.16	2.76	1.03	5.44	106½
Am. Locomotive	Def.	7.45	4.80	1.92	5.40	136
Am. Steel Foundries.....	4.48	4.49	3.84	3.02	4.70	79½
Baldwin Loco. Works (The)....	Def.	5.60	1.30	Def.	1.07	67½
Gen. Am. Tank Car.....	3.14	3.54	4.57	6.12	7.41	121
Gen. Ry. Signal.....	5.06	11.61	7.78	5.25	8.25	126½
Lima Loco. Works.....	Def.	8.08	Def.	Def.	2.37	57¾
New York Air Brake.....	4.29	5.11	3.65	2.98	4.72	49¾
Poor & Co. "B".....	3.57	4.64	2.28	4.66	4.20	43¾
Pressed Steel Car.....	0.17	Def.	Def.	Def.	1.83	25¾
Pullman .....	.....	.....	3.41	4.86	5.23	99¾
Symington Co. (The).....	0.28	0.06	Def.	Def.	Def.	9
Union Tank Car.....	1.53	1.78	2.29	2.19	2.92	40¾
Westinghouse Air Brake.....	2.20	3.32	2.69	2.05	2.78	67¾

It is rather curious to find that railroad equipment stocks, as a group, follow the direction of market movements in THE MAGAZINE OF WALL STREET'S Railroad group price index, with sometimes a time lag of a month or two, quite regardless of prospective earnings. Orders for locomotives, freight and passenger cars are reported monthly, and from these it is possible to forecast the trend of earnings with considerable dependability. And yet the market movements of railroad equipment stocks have failed conspicuously during the past few years to reflect such estimates. This is only one of many instances in which stock market prices fail to foreshadow coming developments.

E. Business Equipment

In this group are classed a number of prominent companies which manufacture office and business ma-

chines and equipment, such as typewriters, accounting and bookkeeping machines, cash registers, metal office furniture, etc. There is a healthy amount of competition in these lines, but it is not severe enough to prevent the leading companies from rolling up increasing earnings year after year. With our steadily increasing population and growing appreciation of the need for efficiency in the conduct of office routine anything approaching a saturation point seems far removed. Common stocks of leading companies in this group may therefore be regarded as favorable long pull investments, if obtainable at sufficiently attractive prices.

TABLE XVII
PER-SHARE EARNINGS OF LEADING LISTED BUSINESS EQUIPMENT STOCKS
(Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Art Metal Construction.....	2.08	2.83	2.40	2.33	3.28	30%
Burroughs Adding Machine.....	0.83	1.09	1.44	1.65	2.34	96%
Internatl. Business Mach.....	4.43	5.90	6.95	8.41	10.51	242%
Natl. Cash Register "A".....	5.18	4.51	4.70	5.21	5.25	148%
Remington Rand .....	.....	.....	1.17	1.15	3.50	57%
Telaugraph	0.65	0.83	1.08	1.30	1.44	25%
Underwood-Elliott Fisher .....	.....	.....	.....	6.77	10.08	181%

Price movements in the business equipment group tend to follow the trend of the Combined Average; but usually decline less on reactions and advance further than the general market on the upswings. It may be noted that business equipment stocks have not, on an average, dropped so far below intrinsic values as stocks in other groups.

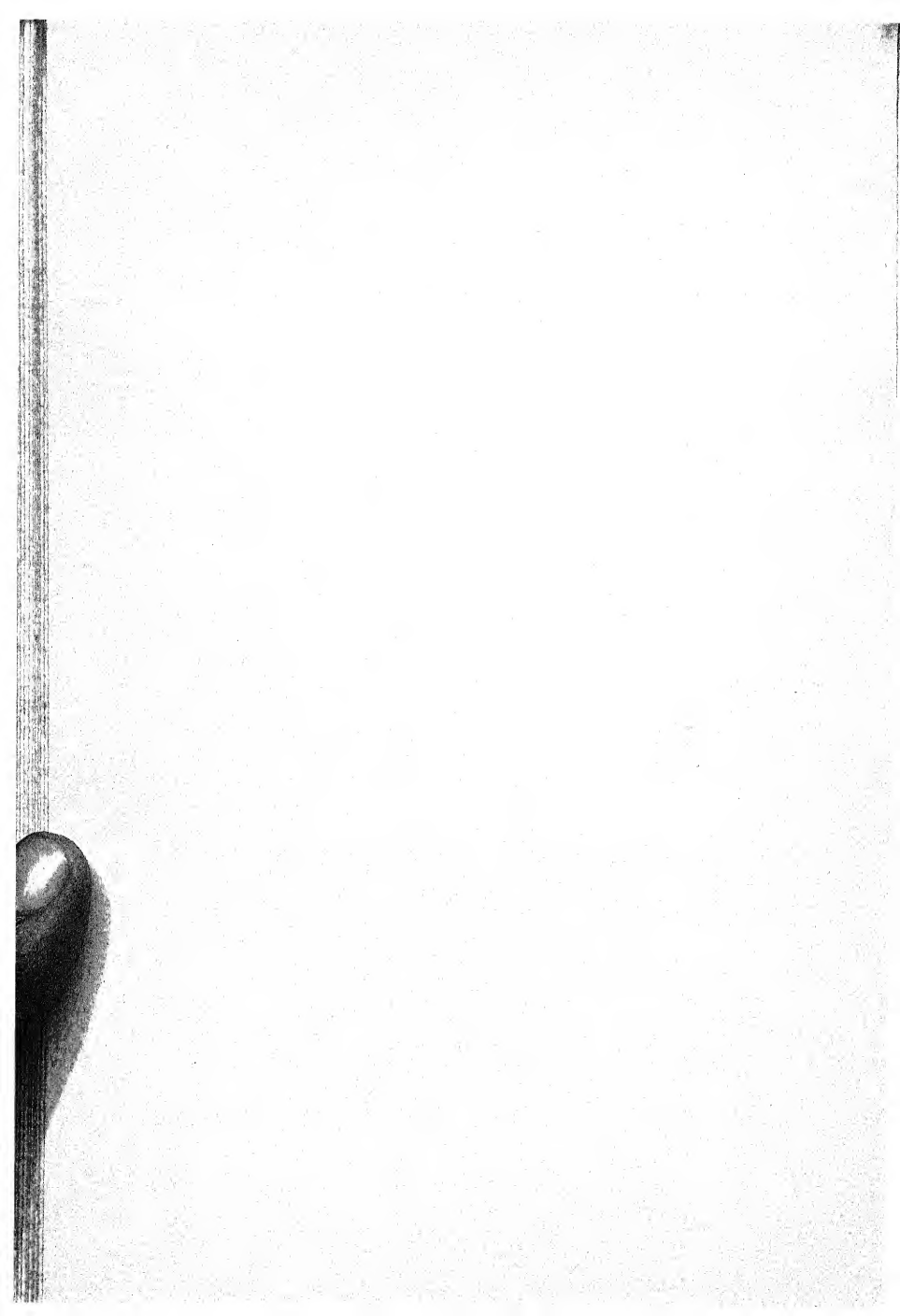
F. Agricultural Implements

Contrary to a rather prevalent impression, there are no satisfactory economic barometers for forecasting price movements in the agricultural implement stocks. THE MAGAZINE OF WALL STREET'S Combined Average is about the best guide; for the agricultural implement group usually turns upward about the same time as the Combined Average and lags about a month behind on downward movements.

The long pull trend of agricultural implement stocks, however, is influenced considerably by the ups and downs in agricultural prosperity, so that only one of the leading listed agricultural implement companies, International Harvester, has been able to show consistent growth in per-share earnings over the past four years. This company's gratifying record has been made possibly partly by its large and growing export trade, and partly by income from collateral lines of activity. Few people realize that International Harvester is one of the largest manufacturers of automobile trucks and busses in the country.

TABLE XVIII
PER-SHARE EARNINGS OF LEADING LISTED AGRICULTURAL
IMPLEMENT STOCKS
(Compensated for Stock Dividends and Split-ups)

Company	1925	1926	1927	1928	1929	1929 High
Advance Rumely	Def.	Def.	Def.	0.00	Def.	104 $\frac{1}{2}$
Case (J. I.) Co.	15.30	23.31	25.98	26.94	20.42	509
Caterpillar Tractor		2.66	3.70	4.78	6.16	88
Internatl. Harvester	3.36	4.11	4.21	5.58	7.11	142
Mnpls.-Moline Pwr. Implement	0.60	1.45	1.93	3.56	1.87	43 $\frac{5}{8}$
Oliver Farm Equipment.....	Def.	Def.	Def.	1.13	1.97	64 $\frac{1}{2}$



CHAPTER XI

Investment Trusts

DIVESTED of technicalities, an Investment Trust is a concern which engages primarily in the business of investing its capital in the securities of a number of other companies, without participating in their management; whereas a Holding Company does participate in the management of, and usually controls, the companies whose stock it holds. Sometimes it is difficult to distinguish between the two, and the investment holdings of a number of supposedly operating companies are so large that income from this source may even overshadow the profits from lines of activity for which they were originally organized. A few investment trusts also engage in the underwriting of new securities.

The investment trust, though an old institution in England, is of comparatively recent origin in the United States. The first in this country, United Electric Securities Company, was organized in 1890. Three years later the Boston Personal Property Trust was

TABLE A
ESTIMATED GROWTH OF INVESTMENT TRUSTS IN THE UNITED STATES
AND CANADA

Year	Number in Operation End of Year
1890.....	1
1900.....	2
1914.....	10
1921.....	13
1924.....	15
1925.....	29
1927.....	139
1928.....	165
1929.....	450

formed. It is still active, and enjoys a good record. Up to the outbreak of the great war eight more were launched; but the real vogue for this type of organization dates back to about 1925, as will be observed from Table "A."

The total invested capital of existing investment trusts is now estimated to be in excess of \$4,000,000,000, of which nearly half was subscribed in the year 1929.

Investment trusts sprang into great favor toward the culmination of last year's bull market; because it was believed that they offered to the investor of more or less limited resources an opportunity to participate in the benefits of wide diversification and expert management of their funds without any personal trouble or expense. Theoretically this is true and, considering the newness of these organizations, it must be admitted that the majority of them came through the trying test of a great bear market with fewer casualties than might have been expected.

Among investment trusts in the United States there are two commonly employed methods of diversification, and three types of management. The *general* investment trust is empowered by its charter, by-laws, or the trust agreement, to invest in a wide variety of securities—municipals, governments, rails, utilities, industrials; and can divide its investments geographically, even internationally. The *specialized* investment trust can diversify only within a single industry—as banking, mining, public utility; or is perhaps limited to a specific class of securities, such as bonds, domestic securities, foreign securities, or only seasoned stocks.

The amount of discretion permitted in the selection of industrial securities, and the decision as to when to buy and sell, varies all the way from complete freedom of action to no latitude whatever. In the *management* type of investment trust, few if any restrictions are

placed upon the management; in the *fixed* type, the list of securities to be held is specified in the agreement, and the management is given little or no power of substitution: in the *designated*, or *semi-fixed*, trust, there are provisions for substitutions in the portfolio from a carefully selected reserve list of standard securities, at discretion of the management.

The *financial trading company* is similar to the general management type in organization; but usually possesses much broader powers, and pursues an avowedly more speculative policy. Purchases and sales, and even short sales, are entirely at discretion of the managers without restriction. The primary object is to make quick profits by in and out trading, or perhaps by taking over and disposing of estate and "distress" stock, or assisting in merger financing. It engages in the most speculative branch of the investment field and, while capable of producing large profits, if honestly and shrewdly managed, is also subject to great losses and dangerous entanglements. It is perhaps just as well that this type of trust, sometimes known as a "blind pool," is in the minority; for there are few real experts in this specialty.

Confronted by such diverse types of investment trust, the investor can be pardoned a high degree of confusion as to which best meets his requirements. Experience has shown, however, that all these types tend in time to blend into one another. In practice, a blind pool may become a staid, long term investment fund. A general management trust may evolve into a reckless trading company or, if its charter permits, may become specialized. Holding companies become investment trusts, and companies originally formed to operate in one industry change into general management types. It is also a matter of record that the most rigid restrictions will not protect the investor from dishonest or

incapable management, nor will the absence of all restrictions prevent him from profiting by management of ability and integrity.

So long as a fixed trust remains true to type, the attractiveness of its stock as a long pull investment obviously depends largely upon the composition of its portfolio. If the list is confined to a steadily growing industry, such as electric light and power, the stock of such an investment trust would be incomparably more desirable than if the portfolio were limited to, say, sugar stocks. Just a glance at THE MAGAZINE OF WALL STREET'S Common Stock Price Index will disclose the wide diversity in prosperity among different industries during the past few years.

When it comes to selecting long pull opportunities among the many existing management trusts we find that management is of prime importance; for the portfolio may be changed so often that a list of holdings is of little assistance in judging the possibilities. In forming an opinion of managerial ability one must look up the records, reputations, and connections of the personnel. In this connection it is reassuring to learn that a preliminary examination of the returns from questionnaires sent out by the State of New York to some 270 investment trusts with aggregate assets of about four and a half billion dollars has disclosed only a very small percentage of dishonesty in management.

If a trust has been operating for a period of several years (the longer the better), one of the best tests of management is to compare the periodically reported increases and decreases in the market value of its total holdings with the corresponding changes in price level of THE MAGAZINE OF WALL STREET'S Common Stock Price Index. If the appreciation in market value consistently exceeds the rise in the price index, when both are expressed as percentages of the starting point, then

it may be presumed that the management is capable. A recent analysis of thirteen leading investment trusts, for example, shows an average decrease, during the first half of the present year, of only 6.2% in the market value of their holdings as compared with an 11.9% decline in THE MAGAZINE's Combined Average. One of these, the State Street Investment Trust, actually reports a slight appreciation.

In selecting investment trust stocks of the designated, or semi-fixed, type it is essential both to analyze the portfolio and to investigate the management.

Investment trusts of the general management type should offer the greater possibility of appreciation in one's principal, by virtue of their great flexibility; yet the chances of loss here through incapability, and even occasionally from dishonest management should not be overlooked. In England, where investment trusts have been systematized and standardized, the management type is the only one that has been developed. Here in America, this type was most popular among the flood of flotations last year, and is still in the majority; but the late bear market has resurrected a spirit of caution among investors, and most of the new investment trust issues during the past eight months have been of the fixed or semi-fixed type.

A recent analysis of the portfolios of 114 of the larger investment trusts, with aggregate resources in excess of two and a half billion dollars, discloses that there are 23 identical common stocks which are held by over thirty of the 114. This list of the 23 stocks which are most popular among the investment trusts is given in Table "B."

It is interesting to observe that the average market decline in these stocks during the first half of 1930 was 7.8%, compared with 11.9% for THE MAGAZINE OF WALL STREET's Combined Average, which agrees well

TABLE B
THE 23 MOST POPULAR INVESTMENT TRUST HOLDINGS

Group	Stock
AGRICULTURAL IMPLEMENTS.....	International Harvester
CHEMICALS	Union Carbide & Carbon
FOODS	National Dairy Products
METALS	American Smelting & Refining
OILS	Standard Oil of N. J.
	Texas Corp.
RAILS	Atchison, Topeka & Sante Fe
	New York Central
	Pennsylvania
	Union Pacific
RETAIL MERCHANDISING.....	Sears, Roebuck
STEELS	U. S. Steel
TOBACCOS	American Tobacco "B"
UTILITIES	American Tel. & Tel.
	Columbia Gas & Electric
	Consolidated Gas of N. Y.
	Electric Bond & Share
	Public Service of N. J.
	United Gas Improvement
MISCELLANEOUS	American Can
	General Electric
	Gillette Safety Razor
	Westinghouse E. & M.

with our previously calculated performance record for the same period. An unfortunate result of this unanimity of opinion among investment trust experts is to create a scarcity value for the stocks they hold, so that current yield and future appreciation in market price are likely to be less than if the portfolios were more diversified. There is an old market adage that little profit is to be had by following the crowd, and even an investment expert should guard against being carried away by the temptation to imitate.

The value of investment trust bonds and preferred stocks can be measured by the same yard sticks that are applied to like issues of industrial companies; but is very difficult to decide what their common stocks are worth, on account of the practical impossibility of estimating with any degree of certainty what the future trend of per-share earnings will be. Accounting practice differs widely among investment trusts at the present time, especially in the matter of handling stock

dividends and fluctuations in the market value of holdings. An investor should never purchase an investment trust common stock until he understands clearly just what is included in, and excluded from, reported earnings.

It is also of vital necessity, before purchasing investment trust securities, to ascertain full particulars as to outstanding options; for exercise of these options in the future may prove to be a serious source of asset dilution and price depression. In citing a concrete illustration of how this would work, it should be explained that the "break up," liquidating, or book value, of an investment trust security, is what the holder of one unit would receive in cash if all the investments in the trust's portfolio were disposed of at current market prices and the proceeds, after paying off any indebtedness, were distributed pro rata among security holders.

The American Founders Trust, on June 1, 1926, according to its management contract with the International Securities Trust of America, had earned options on 125,251 $\frac{1}{3}$ shares of common stock of the latter at an average price of a little over \$11 a share. At that time, the International Securities Trust had outstanding 48,393 shares with a breakup value of \$47.54, and a market price of \$74. Exercise of the options would have reduced the book value of International Securities Trust shares to about \$20, and the market value to around \$30. It was an impossible situation, and the American Founders Trust, wisely recognizing it, rescinded the fiscal agreement and, in lieu thereof, purchased 600,000 shares of B stock, and 10,538 $\frac{1}{2}$ shares of A stock, of the managed trust at a favorable price—about \$2,600,000 in total.

CHAPTER XII

Miscellaneous Industries

WE HAVE left for the present chapter a number of industries which, though important in themselves, are not generally classed as key industries in the sense that their own state of activity exerts any great influence upon the country's general prosperity. There are so many of these that only a few of the highlights of each can be touched upon.

Economic barometers can be devised to forecast group movements in the securities of a few of these industries; but, for the most part, investors will do well to base their commitments upon the broad trend of the general market.

Textiles

In this group is included a great number of companies which turn the raw materials, cotton, flax, rayon, silk, and wool, into fabrics and wearing apparel. It is an industry which supplies the major portion of our clothing, upholstering, window hangings, bed and floor coverings—not to mention tenting and a great variety of other material for miscellaneous uses.

Earnings of most of the companies in this group are extremely sensitive to ups and downs of the general business cycle. People buy clothing and textiles when employment is high and everyone is optimistic; but they are quite prone to wear out old clothes during periods of hard times, when everyone is pessimistic as to the future. Some economists hold that is the piling up of invisible stocks (of which apparel is an important

component) during periods of general prosperity, and the ensuing buyers' strike on the part of ultimate consumers, which is one of the chief causes of the violent swings in the business cycle. In any event it is important for investors in the textile stocks to time their purchases and sales according to the outlook for the general market as a whole.

It is also essential for the investor in textile securities to keep an eye upon major price movements in raw materials. Declining prices lead to inventory losses and lower profits, while rising prices for raw material are generally beneficial.

There was a time when securities of the leading textile mills were closely held and looked upon as investments of the highest grade. Of recent years, however, a number of disruptive developments within this great industry has caused such securities to fall from their high estate. Among these were invention of the new raw material, rayon; radical fashion changes in women's wearing apparel, which greatly reduced the total consumption of material—especially woolen; the growing vogue of silk arising from the rapid increase in prosperity among the masses; and the blight that settled upon old established mills of New England in consequence of the growing competition offered by newer mills in the South, located nearer the main sources of raw material and operating with cheaper labor.

Generally speaking, these unfortunate developments have exerted a more depressing influence upon the earnings of fabric manufacturers than upon the makers of apparel. The latter have succeeded in warding off competition to a large extent by foresighted expenditures for goodwill advertising, and have been able to adapt their production schedules to changes in style. It is well for the investor in textile stocks to keep a vigilant eye upon all these shifts in trends. At present

writing, for example, the outlook points strongly to longer skirts for women. This would seem to foreshadow a rising demand for material that enters into both their outer and under garments, with a gradually receding production of all-silk hosiery. It would thus be reasonable to suppose that the earnings of leading producers of cotton and rayon textiles will rise gradually at the expense of the silk division. Cotton goods

TABLE XIX
PER-SHARE EARNINGS RECORD OF LEADING LISTED TEXTILE STOCKS
(Compensated for Stock Dividends and Split-ups)

A. Knit Goods						
Stock	1926	1927	1928	1929	1929 High	
Adams-Mills	2.56	3.52	3.68	4.83	35 $\frac{1}{2}$ %	
Durham Hosiery Mills.....	0.47	Def.	Def.	1.32	23	
Gotham Silk Hosiery.....	6.32	7.76	5.53	3.32	60	
Kayser (Julius) & Co.....	4.47	5.34	5.93	4.00-e	61 $\frac{3}{4}$	
Phoenix Hosiery	8.83	3.11	1.12	1.03	37 $\frac{1}{2}$ %	
Real Silk Hosiery Mills.....	2.72	1.86	5.49	9.31	84 $\frac{3}{4}$ %	
Van Raalte	Def.	Def.	Def.	0.30	42	
B. Other Apparel						
Assoc. Apparel Industries.....	4.66	4.94	4.45	5.09	58 $\frac{1}{4}$	
Cavanaugh-Dobbs	1.37	3.36	2.90	1.18	42 $\frac{1}{2}$ %	
Cluett, Peabody & Co.....	6.51	9.86	5.26	1.71	72 $\frac{3}{4}$	
Fashion Park Assoc.....	3.86	3.50	5.24	3.00-e	72 $\frac{3}{4}$ %	
Kuppenheimer (B.) & Co.....	5.90	6.64	5.28	5.73	43 $\frac{1}{2}$ %	
Manhattan Shirt	3.85	4.53	3.38	3.32	35 $\frac{1}{2}$ %	
Munsingwear	6.64	5.95	7.38	7.74	61 $\frac{3}{4}$	
Phillips-Jones	4.15	4.37	4.05	3.45	73	
Reis (Robert) & Co.....	Def.	Def.	Def.	Def.	16 $\frac{1}{4}$	
C. Cotton						
Cannon Mills	3.68	3.15	2.45	4.16	48 $\frac{3}{4}$	
Consolidated Textile	Def.	0.11	Def.	Def.	6 $\frac{1}{2}$ %	
Pacific Mills	Def.	3.26	Def.	2.60	37	
D. Rayon						
Industrial Rayon		9.08	8.27	7.26	128 $\frac{1}{2}$	
E. Silk						
Belding Heminway	1.90	1.24	Def.	Def.	17 $\frac{3}{4}$	
Century Ribbon Mills.....	Def.	Def.	Def.	Def.	20 $\frac{1}{4}$ %	
Duplan Silk	2.69	1.86	2.52	2.50-e	28 $\frac{1}{2}$ %	
Mallinson (H. R.) & Co.....	Def.	1.64	4.03	Def.	12 $\frac{1}{4}$	
United Piece Dye Works.....	2.52	2.06	3.64	3.23	48 $\frac{1}{2}$ %	
F. Wool						
American Woolen	Def.	Def.	Def.	Def.	27 $\frac{1}{2}$ %	
Collins & Aikman.....		1.77	1.85	1.73	72 $\frac{1}{4}$	

e Estimated.

will enjoy the added advantage of cheap raw material during the coming year or two.

In view of these considerations, and the added prospect for gradual improvement in the general stock market, we would be inclined to believe that, for awhile after this volume is published, opportunities for profitable investment may be found among some of the sounder and more progressive textile companies.

Amusement

The film industry, silent and talking, has enjoyed a mushroom growth of recent years, during the progress of which rapidly mounting box office receipts have been able to absorb extravagant expenditures for salaries, settings, property acquisitions and amortization of films. Some day the industry will have to trim expenses down to a more businesslike level, and become more conservative in the prices paid for acquisitions. The necessity for this readjustment was postponed a few years ago by the opportune appearance of the talking pictures, the novelty of which brought a new lease of life to the movies, and it may be that television will become sufficiently practical commercially in time to again postpone for a few years the inevitable housecleaning.

In view of the rapid expansion in receipts, the amusement industry has hitherto been regarded as depression proof; but events of the past summer have tended to cast some doubts upon the immunity of this form of entertainment to the adverse influences of future business depressions. Hot weather this year, and the sudden vogue of miniature golf, have made inroads into attendance at the movies. There is always the possibility, too, that people may tire of the sometimes too noisy talkies, and that private television and radio combination

sets of the future may tempt a number of people to stay comfortably at home for their entertainment.

Another difficulty that should be taken into account by investors is that the financial reports of amusement companies have not always been so frank as might be desired in disclosing essential information.

Under the circumstances, the common stocks of some of the amusement companies should be regarded more as speculations than as conservative long pull investments. Time will doubtless prove that a few of these companies are destined to grow healthily and survive; but the process of elimination in this field has not yet been completed.

Aviation

Aviation is a rapidly growing industry; but so new that its securities must be regarded as speculative for several years to come. Out of the numerous eliminations that invariably mark the progress of an infant industry it is reasonable to suppose, however, that the largest and strongest companies will survive and eventually attain investment status.

The Aeronautical Chamber of Commerce of America has recently begun to compile and publish statistics of the industry which, within a year or two, should enable one to construct economic forecasting barometers for the group, after the pattern of those described in our chapter on Automobiles. In the meantime investors will be best guided in their operations by the trend of the general market, readings of the technical position of individual stocks, and intelligent attention to news items relating to the industry and individual companies.

Cans

Prosperity of the can manufacturers depends largely

upon the size of the season's fruit and vegetable crops, and the amount of carryover from the previous season; although of recent years the two leading companies in this group—notably American Can—have been diversifying their output with the view to freeing themselves in some degree from the fickleness of agriculture. The volume of sales for this product is not closely related to the general business cycle, though profits may be affected to some extent by violent changes in commodity prices. But even though the industry is nearly depression proof, so far as general business conditions are concerned, the securities of leading can manufacturers tend to conform more or less closely with the more important swings in the stock market as a whole. This is merely a special case of the general rule that there is no such thing as a depression proof stock, even though the industry itself be depression proof. The great advantage of true depression proof industries to the investor is that their securities may be purchased at the end of a major bear market with reasonable certainty that the market price will eventually recover and yield a handsome profit.

Other Containers

This group includes manufacturers of bags, bottles, boxes, and other containers, except cans. Their profits move up and down with the general business cycle, to a large extent, and are also affected somewhat by competition and costs. All four of the stocks in this group, listed in Table XX, D, should be regarded as more or less speculative, and tend to follow the broader price movements in the Combined Average of all stocks.

Chemicals

Stocks in this group are of companies engaged in the production of industrial chemicals, such as chlorine,

dyestuffs, solvents, carbon black, alcohol, and explosives. It is therefore quite to be expected that their earnings should rise and fall with the cycle of general industrial activity, and that there securities should conform fairly closely with important price movements in the general stock market. With the conspicuous exception of alcohol producers, however, most of the industrial chemical concerns are protected from competition by patents, secret processes, and well advertised trade marks: so that earnings rebound quickly after a general business depression has passed.

Nearly half of the industrial alcohol that is produced in this country is used in anti-freeze solutions; so that mild winters are unfavorable to this branch of the industry. At present writing the alcohol makers are being adversely affected also by the high cost of black jack molasses, the raw material from which ethyl alcohol is made, and also by prospective competition from a new synthetic process recently developed by another chemical company.

Carbon black is to some extent a byproduct of the natural gas industry; and the recent phenomenal growth in the consumption of natural gas has tended to flood the market with carbon black.

Drugs and Toilet Articles

Most of the listed stocks in this group, as will be observed from the data presented in Table XX, F, enjoy a consistent record of increasing per-share earnings, which is not even broken by periods of general business depression. However, as just pointed out in our discussion of the Can stocks, this does not render their stocks depression proof. The rule here for shorter pull investors is to buy stocks of the sounder companies in this group at a time when the outlook favors a broad upward movement in the general market

averages, and to dispose of them when the move seems about over. A few of these stocks may be regarded as sound investments to be held for a number of years.

Fertilizers

The earnings of companies in this group are largely determined by the degree of prosperity of agricultural regions, especially of the Southern cotton planter, and are thus subject to violent ups and downs. When crop prices are low, farmers curtail their purchases of fertilizers, and what they do buy is likely to be on long term credit which is slow of collection. For this reason most of the stocks in this group are highly speculative, and should be bought only when indications point to rising prosperity of the farming industry.

Finance Companies

Actual experience during the current business depression has tended to refute earlier dire predictions regarding the risk attached to installment paper. A recent authoritative survey discloses that practically all of the loans extended last year by conservatively managed finance companies has been repaid with incredibly small losses, and that the volume of new installment sales financed this year by the larger companies will probably exceed that of the boom year, 1929. Part of this sustained volume of new business arises from the fact that, although general retail sales do fall off during periods of business depression, the percentage of time contracts tends to rise, since people lack the funds, or are too cautious, to pay cash in full. Even the business of companies whose activities are confined largely to the financing of automobile purchases falls off at such times less than the volume of new automobile production; since people turn more to used cars during hard times. Up to a certain point, therefore, one may look

upon leading finance companies as depression proof; although their stocks are not. For this reason stocks in this group, as in many others, should be purchased only when the outlook points to a broad upward movement in the entire stock market.

Household Goods

This is a rather heterogeneous group of products which includes ice, soaps, cleansing preparations, matches, refrigerators, sewing machines, vacuum cleaners, washing machines, and the like. Stocks of all these companies tend to follow important price movements in the general stock market; but the magnitude of swing varies considerably in individual instances. The earnings of these companies may or may not be greatly affected by conditions of general prosperity, depending upon the nature of the product. The earnings of ice companies, for example, hinge chiefly upon the weather: a prolonged hot summer being favorable, and a short cool summer unfavorable. Sewing and washing machine producers are obviously affected adversely by periods of general business depression.

A few of these companies, which have been long established, and are protected from competition by well advertised trade marks, or not handicapped by an inferior product, may be regarded as promising business men's investments at prices prevailing near the end of a major bear market. In this connection, it may be explained that a "Business man's investment" is one that may be regarded as safe only for the person who watches developments closely, and has the judgment to get out promptly when the outlook for companies in which he is financially interested becomes less favorable than anticipated at the time his original purchase was made.

Paper

This industry has been in a state of transition during the past few years, and will be for several years to come, due to the moving of plants by leading producers from America, with its dwindling supply of cheap pulp wood, to more advantageous sites in Canada, where water power and pulp wood are in abundant supply. Eventually the leading Canadian producers should develop gratifying earning power; not only from paper making, but from the sale of electric power. In the meantime, the paper industry is generally suffering from over-expansion of plant capacity, and the investor can, with the possible exception of a few companies that sell trademarked specialties, find other investment media that will bring quicker profits than the paper stocks during the next few years.

Phonographs and Radio

Phonographs are here included with radio, because leading makers of the former are rapidly being absorbed by producers of the latter. Where formerly it was feared that the radio would displace phonographs, it has now become evident that one supplements the other, and it is obviously advantageous from both a manufacturing and a sales point of view that both instruments should come under the same management. Hitherto the radio industry has suffered, and probably will continue to suffer for several years to come, from the growing pains that are common to all infant industries. It is the old story of overproduction, heavy write-offs for equipment rendered obsolete by improved models, excessive competition, and elimination of the weaker units. Within a few years the introduction of television on a commercial scale promises to prolong the period of unsettlement in the industry. In

view of the many still existing uncertainties it is not possible to determine now what any of the stocks in this group are really worth; but it is logical to suppose that the largest and strongest companies will continue to grow bigger and stronger, and so prove eventually to be profitable investments to those who possess the patience to wait and the courage to disregard intermediate violent fluctuations in earnings and market prices. Shorter term investors will do best to be guided in their commitments by the outlook for the general market and by readings of the technical position of individual stocks.

Printing and Advertising

Here are included leading printers, publishers, advertising concerns, and the manufacturers of printing equipment and supplies. Many of these houses have been long established and have made themselves almost immune from destructive competition through patents and solidly built goodwill. The recent depression in the stock market has afforded investors a rare opportunity to purchase the stocks of leading companies in this group at unusually attractive prices, due largely to the circumstance that the major portion of profits in this industry depend directly or indirectly upon the volume of paid advertising, and the business world habitually reduces its appropriations for advertising during periods of business depression. Improvement in business conditions will result in a rise in the earnings of these companies and in the market prices of their common stocks.

Real Estate

The three companies whose stocks are listed under this heading in Table XX, N, are engaged in such widely differing activities that no fitting comments are

possible on the group as a whole, beyond pointing out that the earnings of all of them are likely to be adversely affected by periods of general business depression and benefited by general prosperity. Here again the best shorter pull investment policy is to follow the outlook for the stock market as a whole for clues as to when to buy and dispose of such stocks.

Shipping

In this group we find terminal companies, and both builders and operators of freight and of passenger vessels. The American merchant marine has not for many years been on a stable earnings basis, and is normally much affected by fluctuations in the volume of our foreign trade, as well as by freight rates. Since the War, both construction and operating companies have been suffering from a redundancy of now rapidly obsolescing boats built during those few hectic years. Recently, however, there has been a revival in domestic shipbuilding resulting from the aid extended by Congress to this branch of the industry by way of long term loans at low interest rates. Earnings of the leading terminal companies are much more stable, and have of late years proved to be immune from adverse influences.

Shipping stocks are a purchase when the outlook favors a substantial rise in the general stock market, when ocean freight rates are rising, and when the volume of our foreign trade is on the increase; but even where all three of these favorable conditions co-exist, it is important to select issues that are not at the time over-priced in relation to their estimated intrinsic values as determined by the Durand method.

Shoes and Leather

The earnings of leading shoe manufacturers have

been generally quite stable of recent years, and the present outlook is that they will not suffer greatly from the current business depression. The common stocks of these companies, however, tend to move with the Combined Average of all stocks; so that care should be taken to purchase these only when conditions favor a rising stock market, and prices are considerably below estimated intrinsic values.

The common stocks of all the tanneries are highly speculative, as none of these has been able to maintain anything approaching steady earnings. The difficulty here lies chiefly in recurrent heavy inventory losses arising from wide fluctuations in the supply of, and prices paid for, raw material. Hides and skins are merely by-products of the packing industry, and thus come upon the market in quantities that frequently bear no relation to the demand. It is not difficult, however, to forecast the major swings in tannery stocks, which afford another good example of the cycle theory of industry. Space limitations prevent elaboration of the method here; but readers who may be sufficiently interested will find it fully described in *The New Technique of Uncovering Security Bargains*.

Unclassified Companies

Under this heading is placed a number of companies with miscellaneous activities, of which there are not enough of a kind to form a separate group, or whose interests are so diversified that they cannot be classed with any one industry. Many of these stocks are to be regarded as high grade investments: a few are quite speculative. In a general way it may be said that their broader price movements conform fairly well with the Combined Average of all stocks, and may be purchased most advantageously at a time when conditions

point to a rising stock market, and disposed of when the main market trend points downward.

Reading the Technical Position

For a few of the groups included in the present chapter, and some individual stocks, more or less satisfactory economic barometers may be devised as an aid to forecasting important swings in market price. In a general way, the majority of these issues follow the trend of the whole market as reflected in the Combined Average. There are numerous instances, however, where certain individual stocks will at times move independent of the majority. In such cases an analysis of fundamentals and values offers little help in determining the right time to buy a stock and when to dispose of it. There is a way, though, of determining the direction in which a stock is going to move, and approximately when the move is about to begin and when it is about over, which works well in many instances, after one acquires sufficient skill at the game. It is variously known as tape reading, chart reading, or reading the technical position. There is space here to barely outline the rudiments of this method, which has been described at considerable length in other works published by THE MAGAZINE OF WALL STREET.

"Technical position" is a measure of the market's responsiveness to favorable developments and its resistance to unfavorable developments. If close observation of day-to-day fluctuations shows that stocks rise promptly on good news and give ground grudgingly on bad news, it is said that the technical position is strong, and the probabilities favor a considerable advance in prices. On the other hand, a market that will not advance on good news, or which sells off sharply on bad news and does not soon rebound, is in weak technical position, and the next important move will probably be

downward. When analyzing the technical position, the expression "Movement of the Combined Average" may be substituted in the foregoing for the word, "News."

Stocks move in waves. A step ladder formation in which the tops and bottoms of successive waves are higher than those of preceding waves indicates a strong technical position; whereas a weak technical position is indicated by the opposite formation.

Increasing volume of sales near the crest of successive waves is a favorable indication: decreasing crest volumes are unfavorable. Decreasing volumes at the bottoms of successive waves are favorable indications: increasing volumes at the bottom are unfavorable.

TABLE XX
PER-SHARE EARNINGS RECORD OF LEADING LISTED STOCKS IN MINOR GROUPS
(Compensated for Stock Dividends and Split-ups)

A. Amusement						
Stock	1926	1927	1928	1929	1929 High	
Consolidated Film Industries.....	0.47	1.35	2.25	3.41	25¾	
Fox Film "A".....	6.25	6.24	6.47	10.28	105½	
Gen. Theatres Equipment.....		0.34	0.48	1.72	66	
Loew's.....	4.94	5.08	5.98	7.91	84½	
Madison Square Garden.....	2.43	3.06	1.52	1.35 ^e	24	
Paramount Publix.....	2.82	4.28	4.27	6.36	75½	
Pathé Exchange.....		Def.	Def.	Def.	14½	
Radio-Keith-Orpheum "A".....	2.69	1.38	Def.	0.62	46¾	
Shubert Theatre.....	10.16	7.53	5.05		74½	
Warner Bros. Pictures.....	Def.	0.03	1.86	6.33	80¾	
B. Aviation						
Aviation Corp. (Del.).....				Def.	20	
Curtiss-Wright.....				Def.	30¾	
Nat. Air Transport.....	Def.	Def.	0.42	1.03	48¾	
North American Aviation.....				0.27	24	
United Aircraft & Transport.....				4.02	162	
C. Cans						
American Can.....	4.39	4.11	6.86	8.02	184½	
Continental Can.....	3.36	3.77	4.35	5.02	92	
D. Other Containers						
Container Corp. of America "B"....		1.08	0.72	0.61	11½	
Mengel Co.....		1.10	1.15	2.78	34¾	
Owens-Illinois Glass.....				4.57	85¼	
Union Bag & Paper.....	Def.	Def.	Def.	Def.	43	

^e Estimated.

TABLE XX—Continued
PER-SHARE EARNINGS RECORD OF LEADING LISTED STOCKS IN MINOR GROUPS
(Compensated for Stock Dividends and Split-ups)

E. Chemicals & Dyes					
Stock	1926	1927	1928	1929	1929 High
Air Reduction	3.63	3.58	4.60	7.75	233 $\frac{3}{8}$
Allied Chemical & Dye.....	9.32	9.55	10.59	12.00	337 $\frac{7}{8}$
Amer. Solvents & Chemical.....	0.19	Def.	1.84	2.56	40 $\frac{3}{4}$
Archer-Daniels Midland	3.18	3.26	4.02	2.45	55 $\frac{1}{4}$
Atlas Powder	7.04	5.75	6.30	7.66	140
Columbian Carbon	6.30	4.83	6.39	7.83	344
Commercial Solvents	0.72	0.85	1.24	1.48	67 $\frac{1}{4}$
Hercules Powder	4.54	4.09	5.51	5.95	130
Mathieson Alkali Works.....	2.56	2.82	3.26	3.31	72 $\frac{3}{8}$
Monsanto Chemical Works.....	1.19	2.34	3.66	4.23	78 $\frac{3}{8}$
Union Carbide & Carbon.....	3.03	3.18	3.72	3.94	140
United Carbon	Def.	Def.	1.99	1.94	111 $\frac{3}{8}$
U. S. Industrial Alcohol.....	3.45	7.01	11.81	12.63	243 $\frac{3}{8}$
Westvaco Chlorine Products.....	Def.	0.87	3.46	4.32	94 $\frac{3}{4}$
F. Drugs & Toilet Articles					
Amer. Home Products.....	3.69	3.67	4.87	5.47	85 $\frac{3}{8}$
Amer. Safety Razor.....	4.88	5.03	5.45	7.71	74 $\frac{3}{4}$
Coty	2.12	2.41	2.91	2.73	77 $\frac{1}{2}$
Drug, Inc.	5.79	5.93	5.50	6.35	126 $\frac{3}{8}$
Gillette Safety Razor	6.03	6.61	7.37	6.16	136 $\frac{1}{4}$
Lambert Co. (The).....	3.38	6.23	9.24	10.04	157 $\frac{1}{4}$
Lehn & Fink Products.....	3.47	3.07	4.59	4.10	68 $\frac{1}{2}$
McKesson & Robins.....	2.50	2.53	3.70	2.65	59
Vadeco Sales .....	.....	.....	.....	0.58	13 $\frac{1}{4}$
G. Fertilizers					
Amer. Agricultural Chemical.....	Def.	1.59	Def.	.....	25 $\frac{3}{8}$
Davidson Chemical	Def.	2.54	3.34	4.25-e	69 $\frac{1}{8}$
International Agricultural Corp.....	Def.	1.34	0.79	0.80-e	17 $\frac{1}{8}$
Tennessee Copper & Chem.....	1.31	0.51	1.48	2.19	20 $\frac{7}{8}$
Virginia-Carolina Chemical.....	Def.	0.69	Def.	.....	24 $\frac{3}{4}$
H. Finance Companies					
Commercial Credit	0.04	1.05	3.58	4.34	62 $\frac{3}{8}$
Commercial Investment Trust.....	2.21	1.83	2.80	3.74	81 $\frac{1}{4}$
I. Furniture & Floor Covering					
Artloom	5.57	3.81	1.54	1.88	30
Congoleum-Nairn	0.34	0.58	0.83	1.28	35 $\frac{3}{4}$
Mohawk Carpet Mills.....	2.07	4.37	3.11	3.02	80 $\frac{1}{4}$
Simmons	2.30	3.75	3.77	4.09	182 $\frac{3}{8}$
J. Household Goods					
Air-Way Elec. Appliance.....	0.68	1.95	3.29	3.86	48 $\frac{7}{8}$
American Ice	4.27	2.92	3.92	4.33	53 $\frac{1}{2}$
Bon Ami "A"	4.75	5.29	5.92	6.78	89 $\frac{1}{2}$
City Ice & Fuel.....	3.33	3.89	4.40	4.62	61 $\frac{1}{8}$
Colgate-Palmolive-Peet	2.78	3.69	2.67	4.03	90
Diamond Match .....	.....	.....	.....	16.61	164 $\frac{3}{4}$
Eureka Vacuum Cleaner.....	6.82	6.55	3.15	4.60	54
Kelvinator	4.14	Def.	Def.	1.03	19 $\frac{1}{4}$
Maytag Co. (The).....	3.32	2.91	2.38	3.33	29 $\frac{1}{2}$
Procter & Gamble.....	2.27	2.41	2.97	3.60-e	98
Servel .....	.....	.....	Def.	Def.	21 $\frac{3}{8}$
White Sewing Machine.....	3.99	4.54	3.36	1.89	48

e Estimated.

TABLE XX—Continued

PER-SHARE EARNINGS RECORD OF LEADING LISTED STOCKS IN MINOR GROUPS
(Compensated for Stock Dividends and Split-ups)

Stock	K. Paper				
	1926	1927	1928	1929	1929 High
Abitibi Power & Paper.....	1.15	1.97	.....	57%	
Albany Perforated Wrapping Paper	1.20	0.61	1.25-e	25	
Amer. Writing Paper.....	Def.	Def.	Def.	16%	
Crown-Zellerbach	1.55	1.72	1.50-e	25%	
Internatl. Paper & Power "A".....	2.15	2.03	Def.	Def.	44%
Kimberly Clark	5.84	5.09	4.31	6.66	57%
Scott Paper	2.14	2.91	3.92	4.67	65
United Paperboard	0.08	1.88	Def.	Def.	26%
L. Phonographs & Radio					
Amer. Bosch Magneto.....	2.16	2.26	5.02	4.22	76%
Brunswick-Balke-Collender	4.17	3.51	5.85	Def.	55%
Columbia Graphophone	0.49	1.15	1.10	1.00-e	88%
Crosley Radio "A".....	1.05	1.37	6.66	2.00	120%
Grigsby-Grunow	0.21	0.56	2.93	1.50-e	70
Kolster Radio .....	.....	0.87	0.20	Def.	78%
Radio Corp. of America.....	0.57	1.23	3.20	1.59	114%
Sparks-Withington	0.28	1.82	3.64	3.00-e	73
Stromberg-Carlson Tel. Mfg.....	1.34	Def.	1.24	.....	141
Zenith Radio	0.29	1.58	2.77	Def.	52%
M. Printing & Advertising					
Amer. Type Founders.....	17.69	9.88	14.24	16.11	181
Butterick Co. (The).....	1.97	3.87	2.32	1.03	41
Conde Nast Publications.....	3.00	3.74	4.43	4.20	93
Curtis Publishing	4.96	6.10	7.24	8.46	132
Gen. Outdoor Advertising.....	3.58	3.59	3.33	1.83	41
Gen. Printing Ink.....	2.39	3.56	5.20	6.01	63
Hall (W. F.) Printing Co.....	4.09	1.67	2.51	3.78	28
Hoe (R. H.) & Co.....	5.95	Def.	Def.	4.22	33
Internatl. Printing Ink.....	4.38	4.98	5.22	6.23	68%
Intertype Corp.	1.88	1.82	2.48	3.05	38%
McCall Corp.	2.41	2.40	3.16	3.76	54
McGraw-Hill Publishing.....	2.73	2.38	3.04	3.72	48
United Business Publishers.....	.....	.....	1.92	3.64	36
N. Real Estate					
Brunswick Terminal & Ry. Sec.....	Def.	0.29	1.50	2.40	44%
Equitable Office Building.....	2.13	2.03	2.25	2.70	41
U. S. Realty & Improvement.....	7.53	7.52	7.73	5.22	119%
O. Shipping					
American-Hawaiian S. S. Co.....	Def.	0.05	0.90	1.39	42
Amer. Ship Building.....	11.50	3.15	4.83	6.00-e	72%
Amer. Ship & Commerce.....	Def.	0.07	0.05	0.15	7
Atlantic Gulf & West Indies S. S. Def.	0.81	Def.	Def.	10.93	86%
Bush Terminal	3.86	4.67	3.90	4.32	82%
Electric Boat	0.59	0.02	1.18	Def.	18%
Internatl. Mercantile Marine.....	.....	.....	.....	4.04	39%
New York Dock.....	2.85	5.12	3.73	4.39	58%
North German Lloyd.....	.....	4.17	3.96	3.99	64%
Submarine Boat	Def.	Def.	Def.	Def.	4%

e Estimated.

TABLE XX—Continued
PER-SHARE EARNINGS RECORD OF LEADING LISTED STOCKS IN MINOR GROUPS
(Compensated for Stock Dividends and Split-ups)

P. Shoe & Leather					
Stock	1926	1927	1928	1929	1929 High
Amalgamated Leather	2.57	Def.	Def.	Def.	11 $\frac{1}{8}$
Amer. Hide & Leather.....	Def.	Def.	Def.	Def.	10
Barnet Leather	5.08	Def.	Def.	Def.	29 $\frac{1}{4}$
Brown Shoe	4.00	6.25	4.60	5.78	51 $\frac{1}{2}$
Endicott-Johnson	7.03	8.68	6.96	5.01	83 $\frac{3}{8}$
Florsheim Shoe	4.80	4.62	5.25	5.88	54
International Shoe	3.43	4.55	4.03	4.37	77 $\frac{1}{2}$
Kinney (G. R.) Co.....	1.19	3.08	3.60	3.27	44 $\frac{1}{8}$
Melville Shoe	2.11	2.97	4.17	3.99	72
U. S. Leather .....	.....	1.78	1.54	Def.	35 $\frac{1}{2}$
Q. Sulphur					
Freeport Texas	2.48	5.12	4.49	5.60	54 $\frac{1}{8}$
Texas Gulf Sulphur.....	3.69	4.76	5.72	6.40	85 $\frac{1}{4}$

TABLE XXI
PER-SHARE EARNINGS RECORD OF LEADING LISTED UNCLASSIFIED STOCKS
(Compensated for Stock Dividends and Split-ups)

Stock	1926	1927	1928	1929	1929 High
Amer. Bank Note.....	2.62	3.33	3.82	4.77	142 $\frac{3}{4}$
Amer. Chain	6.94	5.10	Def.	10.92	49 $\frac{3}{8}$
Anchor Cap	1.37	2.71	4.91	4.02	80
Consolidated Laundries	2.78	1.88	1.55	1.67	21
duPont de Nemours.....	3.99	4.41	5.97	6.99	231
Eastman Kodak	9.50	9.61	9.60	10.26	264 $\frac{3}{4}$
General Refractories	5.56	6.35	6.11	8.51	88 $\frac{1}{2}$
Glidden Co. (The).....	3.31	2.95	3.44	3.50	62 $\frac{1}{4}$
Harbison-Walker Refractories	2.65	2.66	2.94	3.52	87 $\frac{7}{8}$
Hollander (A.) & Son.....	3.38	3.18	0.57	1.18	24 $\frac{1}{2}$
International Salt Co., N. J.....	2.78	1.80	2.41	3.76	30 $\frac{1}{4}$
International Silver	17.25	23.61	13.54	11.12	159 $\frac{1}{2}$
Liquid Carbonic .....	.....	4.25	6.04	5.74	113 $\frac{7}{8}$
MacAndrews & Forbes.....	3.54	3.54	2.90	5.13	46
Nat. Enameling & Stamping.....	Def.	Def.	0.94	2.14	62 $\frac{1}{4}$
National Lead	21.62	8.40	11.45	25.49	210
Savage Arms	3.51	1.77	3.44	4.32	51 $\frac{1}{8}$
Thatcher Mfg.	0.33	0.54	1.98	3.38	35
U. S. Distributing.....	.....	0.79	0.28	0.95	23
U. S. Freight.....	.....	2.99	3.38	3.71	134 $\frac{1}{2}$

CHAPTER XIII

Bonds and Preferred Stocks

Classification of Securities

BONDS and Notes, Preferred and Common Stocks, are all certificates of corporate indebtedness. Bonds, Notes and Preferred Stocks are known as, "fixed income bearing investments"; because the issuing companies pay to holders a fixed sum of money per annum for the use of their funds. The return on bonds and notes is called, "interest"; whereas the return on Preferred Stocks falls under the classification of "dividends." Bonds are usually secured as to principal by a mortgage on the company's fixed assets. Notes may or may not be secured. Bonds and Notes have a definite date of maturity when they must be redeemed in cash. Notes run for a shorter period than bonds—usually from six months to five years. Common and preferred stocks have no maturity. If interest or principle on notes is not paid when due, the company will be sued. If principle or interest on bonds is not paid when due, a receiver will be appointed by the courts. Dividends on common and preferred stocks can be passed without inviting a receivership.

Interest on notes enjoys a first claim on income, then comes bond interest, next preferred dividends and, finally, dividends on the common stock. In the event of receivership, whether followed by dissolution or a reorganization, notes hold first claim on assets, then bonds, next preferred stocks and, finally, the common stock. Bonds and preferred stocks are thus some-

times referred to as "senior securities"; whereas the common stock is a "junior security." Due to the respective priority of their claims on principal and income, notes usually sell on a lower yield basis than bonds, bonds yield less than preferred stocks, and preferred stocks bear a lower rate of return than common stocks. In stating this generalization we refer to what is known as "true yield," which is defined as "current yield" plus market appreciation. "Current yield" is merely the annual cash return, expressed as a percentage of current market price.

The foregoing are orthodox characteristics of the four main types of corporate securities; but, in practice, there are so many hybrid forms that it is sometimes hard to say, for example, whether an issue belongs to the bond or to the stock family. There are debenture bonds, which resemble long-term, unsecured notes; income and adjustment bonds, which are unsecured, and the interest upon which is paid only as earned; and then comes a whole swarm of convertible stocks and bonds, senior securities with option warrants, and preferred stocks which participate in earnings along with the common stock.

Price Movements

The modern investor need not be reminded that even high grade bonds and preferred stocks continually fluctuate in market price; though, excepting convertible issues, within a narrower range than is usually traversed by securities of lower rating. These movements are attributable to changes in earnings; changes in the rental value of money; changes in the supply of, and demand for, the issue; and, in the instance of convertibles, to fluctuations in the market price of securities into which they are convertible. Ordinarily, bond prices are largely based upon prevailing rates

for money; whereas the prices of common stocks respond chiefly to changes in the outlook for earnings. Preferred stocks occupy a middle ground, so that their market prices respond to changes in both interest rates and prospective earning power.

There is a tradition in Wall Street that bonds lead the way in major market movements, followed next by preferred stocks, and finally by common stocks. A study made recently by THE MAGAZINE OF WALL STREET shows that such is not always the sequence, and that a good deal depends upon what price indexes are used. The accompanying table summarizes the results. In view of the irregularities disclosed by this table, about the safest rule to follow, for investors who wish to combine speculative profits in senior securities with a conservative cash income, is to buy

SEQUENCE IN MAJOR PRICE MOVEMENTS OF SECURITIES

DOW-JONES		STANDARD STATISTICS	
Industrials	Railroads	Preferred Stocks	Bonds
High-1901-June	High-1902-Sept.	.....	High-1902-Apr.
Low-1903-Sept.	Low-1903-Sept.	.....	.....
High-1906-Jan.	High-1906-Jan.	.....	.....
Low-1907-Nov.	Low-1907-Nov.	.....	Low-1907-Nov.
High-1909-Nov.	High-1909-Aug.	.....	High-1909-Aug.
Low-1910-July	Low-1910-July	Low-1910-July	.....
High-1912-Sept.	High-1912-Oct.	High-1912-Sept.	.....
a-Low-1914-Dec.	a-Low-1914-Dec.	Low-1915-Mar.	Low-1913-Dec.
High-1916-Nov.	b-High-1916-Oct.	High-1916-Nov.	High-1917-Jan.
Low-1917-Dec.	Low-1917-Dec.	Low-1917-Dec.	c-.....
High-1919-Nov.	High-1918-Nov.	High-1919-July	d-.....
Low-1921-Aug.	Low-1921-June	Low-1920-Dec.	e-Low-1920-July
High-1923-Mar.	High-1922-Sept.	High-1922-Oct.	High-1922-Sept.
f-Low-1923-Oct.	Low-1923-Aug.	Low-1924-Apr.	g-Low-1923-Oct.
High-1929-Sept.	High-1929-Sept.	High-1928-Apr.	h-High-1928-Mar.
Low-1929-Nov.	Low-1929-Nov.	Low-1929-Nov.	i-Low-1929-Oct.

NOTES: a—N. Y. Times shows low in July.
b—N. Y. Times shows high in Nov.
c—Dow-Jones shows low in Sept., 1918.
d—Dow-Jones shows high in Nov., 1918.
e—Dow-Jones and N. Y. Times show low in May.
f—Standard Statistics shows low in July.
g—Dow-Jones shows low in Mar.
h—Dow-Jones shows high in Jan., and N. Y. Times places high in May.
i—N. Y. Times shows low in Nov.

good bonds and preferred stocks when conditions point to an approaching major bull movement in common stocks, and dispose of them when the outlook is for a major downward movement in common stocks.

Investors who wish to take advantage of opportunities for profit created by these price swings will find it worth while to keep charts of price changes in a number of the more active bonds and preferred stocks, along with a graph of 90-day time money. By carrying these graphic records back for a few years (weekly closing prices are ordinarily sufficient for the purpose), it will be discovered that price fluctuations in many of these issues are confined within rather definite upper and lower limits which lie upon rather smooth boundary curves. Where issues are undergoing a process of seasoning during the progress of a prolonged bull market, these boundary curves will evince a marked tendency to turn upward. In other words, each new high will tend to exceed the previous one, and the subsequent low point will stop above the one before. By purchasing as prices reach the lower boundary curve, and closing out near the upper curve, short-term investors may be able to make several profitable turns a year in the more active senior issues. It is essential, however, to be on guard lest the price suddenly break through the accustomed boundary curves. This happens every now and then. From 1910 to the middle of 1922, for example, *Standard Statistics'* index of 20 high grade industrial preferred stocks fluctuated within a range of 15 points—from 100 to 115. Toward the end of 1922, however, it broke through the upper limit and rose to a peak of 135, in 1928. During the present bear market this index has not dropped back to within ten points of the high boundary at 115. High grade preferred stocks now seem to have become established on a lower yield

basis than ten years ago. This permanent change in yield appears to be the outcome of a thorough seasoning process.

Convertibles

Under this caption will be included not only bonds and preferred stocks which are directly convertible into other issues; but also senior securities which have been put out with option warrants entitling the owner to purchase other issues at a specified price, within a stated period of time. For present purposes the discussion will be limited to securities which are convertible into, or entitle the owner to purchase, common stocks; for these are by far the most common types. Obviously either of these privileges will at times endow fixed income bearing securities with pronounced speculative characteristics.

As a general rule, prudent investors seldom actually convert their bonds and preferred stocks into common stock, or exercise their warrants, unless—for one reason or another—the privilege is about to expire. If it is believed that the common stock is slated for higher prices, just as big speculative profits can be made by holding the senior security as the common stock; but if the latter should happen to decline below conversion parity, or reduce its dividend materially, the loss in both principal and income would be much greater to common stockholders than to owners of the fixed income bearing issues.

The advantage, then, in buying senior securities with privileges, instead of the common stock, is that the investor can speculate in this way with a limited risk; but with unlimited chances for profit.

Ordinarily, convertible and option warrant securities sell at prices which bear a more or less logical relation to the prices of stock into which they are

convertible; but before purchasing this type of stock or bond—especially if one expects to hold for any considerable length of time—it is very important to scrutinize the provisions under which they were issued. For what issue may the security be exchanged? Who has the option of conversion—the corporation, or the certificate owner? Within what time limits may the privilege be exercised? What is the conversion ratio? When is the security callable or redeemable, if at all; and at what price?

Short term investing in high grade bonds and preferred stocks, without privileges, is not so exciting as speculating in common stocks; but is much less risky. If you are "hung up" in a good senior security, the price is almost sure to come back eventually, and you can enjoy a reasonable cash income in the meantime.

Conclusion

In a volume of the present limited proportions it has not been possible to cover the broad field of investment exhaustively; but an endeavor has been made to present enough of the more important high lights to stimulate the reader to pursue the subject further. Those who have been accustomed to lean heavily upon the advice of others should learn to creep before they attempt to walk alone. In the meantime, make sure so far as possible that the advice you are following is both expert and disinteresting.

Printed in the U. S. A.

